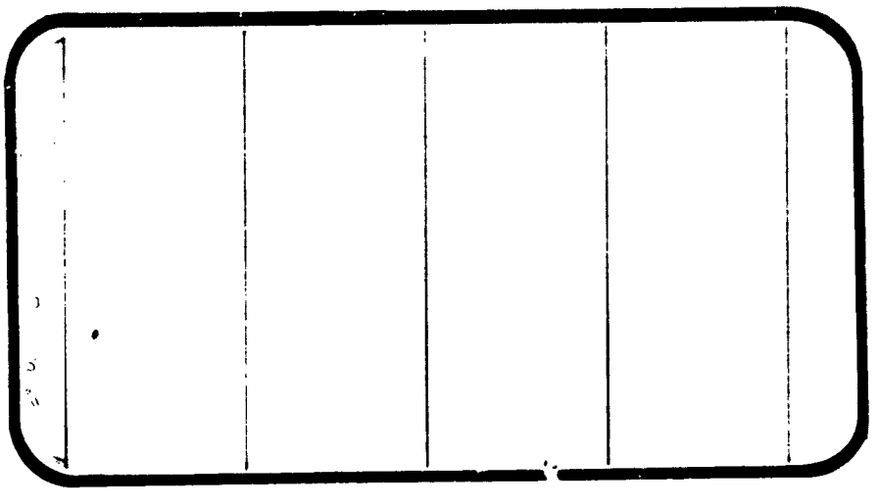
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

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SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT

JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA MANagement services

SPACE DIVISION CHRYSLER CORPORATION

April, 1974

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VOLUME 16 OF 18

RESULTS OF TESTS OA12 AND 1A9 IN THE AMES RESEARCH CENTER UNITARY PLAN WIND TUNNELS ON AN 0.030-SCALE MODEL OF THE SPACE SHUTTLE VEHICLE 2A TO DETERMINE AERODYNAMIC LOADS

By

R. H. Spangler
Rockwell International

Prepared under NASA Contract Number NAS9-13247

By

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for

Engineering Analysis Division

Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

AMES TUNNEL TEST SPECIFICS:

Test Numbers: ARC 11-70T (A)
ARC 97-70T (B)
ARC 87-70T (C)

NASA Series Numbers: IA9A, B, C and
OA12A, C

Test Dates: 9 April - 17 May, 1973

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RESULTS OF TESTS OA12 AND IA9 IN THE AMES RESEARCH CENTER UNITARY PLAN WIND TUNNELS ON AN 0.030-SCALE MODEL OF THE SPACE SHUTTLE VEHICLE 2A TO DETERMINE AERODYNAMIC LOADS

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ABSTRACT

Tests were conducted in the NASA/ARC Unitary Plan Wind Tunnels during April and May 1973, on an 0.030-scale replica of the Space Shuttle Vehicle Configuration 2A. Aerodynamic loads data were obtained at Mach numbers from 0.6 to 3.5.

The investigation included Tests IA9A, B and C on the integrated (launch) configuration and Tests OA12A and C on the isolated orbiter (entry configuration). The integrated vehicle was tested at angles of attack and sideslip from -8 degrees to +8 degrees. The isolated orbiter was tested at angles of attack from -15 degrees to +40 degrees and angles of sideslip from -10 degrees to +10 degrees as dictated by trajectory considerations. The effects of orbiter/external tank incidence angle and deflected control surfaces on aerodynamic loads were also investigated.

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INTRODUCTION

The 0.030-scale Aero Loads Space Shuttle model was tested in the Unitary Plan Wind Tunnels at ARC starting April 2, and continuing through May 17, 1973 as follows:

IA9A	11-foot Transonic	April 2 to April 14, 1973
OA12A	11-foot Transonic	April 16 to April 29, 1973
IA9C	8x7-foot Supersonic	April 23 to May 1, 1973
OA12C	8x7-foot Supersonic	May 2 to May 8, 1973
IA9B	9x7-foot Supersonic	May 9 to May 17, 1973

The testing was conducted in all three legs of the Unitary Plan Wind Tunnels to obtain a Mach number range from 0.6 to 3.5. Aerodynamic loads data were obtained for the ascent and entry configurations. The effects of control surface deflections were also investigated.

This report consists of 3 volumes of force data and 15 volumes of pressure data for a total of 18 volumes arranged in the following manner:

VOLUME NO.	CONTENTS
1	IA9A force data
2	IA9B and IA9C force data
3	OA12A and OA12C force data
4	IA9A plotted pressure data
5	IA9B and IA9C plotted pressure data
6	OA12A and OA12C plotted pressure data
7	IA9A tabulated pressure data (a) orbiter fuselage (b) orbiter base (c) upper MPS nozzle
8	IA9A tabulated pressure data (a) OMS nozzle (b) body flap (c) OMS pod outside (d) lower wing surface
9	IA9A tabulated pressure data (a) upper wing surface (b) left vertical tail surface (c) right vertical tail surface (d) APU inlet (e) SRM booster base
10	IA9A tabulated pressure data (a) SRM booster (b) external tank (c) external tank base

11 IA9B tabulated pressure data
- (a) orbiter fuselage
- (b) orbiter base
- (c) upper MPS nozzle
- (d) OMS nozzle
- (e) body flap
- (f) OMS pod outside
- (g) lower wing surface

12 IA9B tabulated pressure data
- (a) upper wing surface
- (b) left vertical tail surface
- (c) right vertical tail surface
- (d) APU inlet
- (e) SRM booster base
- (f) SRM booster
- (g) external tank
- (h) external tank base

13 IA9C tabulated pressure data
- (a) orbiter fuselage
- (b) orbiter base
- (c) upper MPS nozzle
- (d) OMS nozzle
- (e) body flap
- (f) OMS pod outside

14 IA9C tabulated pressure data
- (a) lower wing surface
- (b) upper wing surface
- (c) left vertical tail surface
- (d) right vertical tail surface

15 IA9C tabulated pressure data
- (a) APU inlet
- (b) SRM booster base
- (c) SRM booster
- (d) external tank
- (e) external tank base

16 OA12A tabulated pressure data
- (a) orbiter fuselage
- (b) orbiter base
- (c) upper MPS nozzle
- (d) OMS nozzle
- (e) body flap
- (f) OMS pod outside

17 OA12A tabulated pressure data
- (a) lower wing surface
- (b) upper wing surface
- (c) left vertical tail surface
- (d) right vertical tail surface
- (e) APU inlet

18 OA12C tabulated pressure data
- All components

NOMENCLATURE
General

SYMBOL	SADSAC SYMBOL	DEFINITION
a		speed of sound; m/sec, ft/sec
C_p	CP	pressure coefficient; $(p_l - p_\infty)/q$
M	MACH	Mach number; V/a
p		pressure; N/m^2, psf
q	Q(NSM) Q(PSF)	dynamic pressure; $1/2\rho V^2$, N/m^2, psf
RN/L	RN/L	unit Reynolds number; per m, per ft
V		velocity; m/sec, ft/sec
α	ALPHA	angle of attack, degrees
β	BETA	angle of sideslip, degrees
ψ	PSI	angle of yaw, degrees
ϕ	PHI	angle of roll, degrees
ρ		mass density; kg/m^3, slugs/ft^3

Reference & C.G. Definitions

A_b		base area; m^2, ft^2
b	BREF	wing span or reference span; m, ft
c.g.		center of gravity
ℓ_{REF} or $\bar{c}$	LREF	reference length or wing mean aerodynamic chord; m, ft
S	SREF	wing area or reference area; m^2, ft^2
	MRP	moment reference point
	XMRP	moment reference point on X axis
	YMRP	moment reference point on Y axis
	ZMRP	moment reference point on Z axis

SUBSCRIPTS

b	base
l	local
s	static conditions
t	total conditions
∞	free stream

NOMENCLATURE (Continued)

Body-Axis System

SYMBOL	SADSAC SYMBOL	DEFINITION
C_N	CN	normal-force coefficient; $\frac{\text{normal force}}{qS}$
C_A	CA	axial-force coefficient; $\frac{\text{axial force}}{qS}$
C_Y	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
C_{A_b}	CAB	base-force coefficient; $\frac{\text{base force}}{qS}$ $-A_b(p_b - p_\infty)/qS$
C_{A_f}	CAF	forebody axial force coefficient, $C_A - C_{A_b}$
C_m	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS\ell_{REF}}$
C_n	CYN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qSb}$
C_ℓ	CBL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qSb}$
		Stability-Axis System
C_L	CL	lift coefficient; $\frac{\text{lift}}{qS}$
C_D	CD	drag coefficient; $\frac{\text{drag}}{qS}$
C_{D_b}	CDB	base-drag coefficient; $\frac{\text{base drag}}{qS}$
C_{D_f}	CDF	forebody drag coefficient; $C_D - C_{D_b}$
C_Y	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
C_m	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS\ell_{REF}}$
C_n	CLN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qSb}$
C_ℓ	CSL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qSb}$
L/D	L/D	lift-to-drag ratio; C_L/C_D
L/D_f	L/DF	lift to forebody drag ratio; C_L/C_{D_f}

NOMENCLATURE (CONTINUED)

ADDITIONS TO STANDARD LIST

SYMBOL	PLOT SYMBOL	DEFINITION
δ_R	RUDDER	rudder, surface deflection angle, positive deflection, trailing edge to the left; degrees.
δ_e	ELEVON	elevon surface deflection angle, positive deflection, trailing edge down; degrees.
δ_{RF}	RUDFLR	rudder flare, split rudder deflection angle, left split rudder trailing edge left and right split rudder trailing edge right, $\delta_{RF} = (\delta_{RL} + \delta_{RR})/2$, positive deflection; degrees.
i_o	ORBINC	incidence angle between the orbiter and external tank, $i_o = \alpha_t - \alpha_b$; degrees.
β_T	BETAT	angle of sideslip of external tank.
α_T	ALPHAT	angle of attack of external tank.
ℓ_B	LB	length of orbiter body; in.
ℓ_T	LT	length of external tank; in.
ℓ_S	LS	length of SRM booster; in.
ℓ_{NM}	LNM	length of OMS nozzle, positive direction forward of exit plane; in.
ℓ_{NP}	LNP	length of MPS nozzle, positive direction forward of exit plane; in.
$b/2$	BW	wing semi-span; in.
b_v	BV	vertical tail span; in.
x	X	distance from component nose; in.
y	Y	lateral distance from centerline; in.

NOMENCLATURE (CONCLUDED)

SYMBOL	PLOT SYMBOL	DEFINITION
z	Z	vertical distance measured from W.L. 500 (vertical tail reference root chord); in.
c_w	CW	local wing chord; in.
c_v	CV	local vertical tail chord; in.
x/ℓ_B	X/LB	longitudinal position/orbiter body length.
x/ℓ_T	X/LT	longitudinal position/external tank length.
x/ℓ_S	X/LS	longitudinal position/booster length.
x/ℓ_{NM}	X/LNM	longitudinal position/OMS nozzle length.
x/ℓ_{NP}	X/LNP	longitudinal position/MPS nozzle length.
x/c_w	X/CW	local chordwise position/local wing chord length.
x/c_v	X/CV	local chordwise position/local vertical tail chord length.
y/b/2	Y/BW	local spanwise position/wing semi-span.
z/b_v	Z/BV	local spanwise position/vertical tail span.

CONFIGURATIONS INVESTIGATED

The 0.030-scale aero loads model was a replica of the Space Shuttle Vehicle 2A. It consisted of four major components: the orbiter, the external oxygen and hydrogen tank (ET) and two solid rocket boosters (SRB).

On the ascent configuration, the orbiter was strut mounted from the ET on a Task Corporation MK XVI 2.5-inch diameter internal balance. The left SRB was strut mounted from the ET on a Task Corporation MK XXII 1.5-inch diameter internal balance. No attempt was made to simulate actual inter-attachments. The ET was sting mounted to the tunnel model support system on a Task Corporation 4.0-inch diameter internal balance. The right SRB was strut mounted symetrically to the left side, but did not contain a balance. The orbiter configuration, designated as O2A, consisted of $B_1OC_5D_7W_8V_5R_5M_3F_4$.

The entry configuration consisted of the isolated orbiter, sting mounted to the tunnel model support system on a Task Corporation MK XXA .5-inch diameter internal balance. Midway through the OA12C test, the MK XXA balance was damaged and was replaced by the MK XXB for the high angles of attack. The orbiter was provided with deflectable elevons by means of interchangeable brackets, deflectable rudder by means of a pin-indexed hinge, and interchangeable rudders to obtain different speed brake flare angles. The main propulsion system engines were removed during entry configuration testing to provide sting clearance. A cover plate was provided for the strut clearance hole.

The orbiter was instrumented with 374 pressure orifices on the left wing, left side of the fuselage, vertical tail, left OMS pod and engine, left and upper MPS engine and the base. The pressures were measured using eleven Scanivalve, Inc., S-type valve modules mounted internally (a five and a six gang unit). When tested in the entry configuration, the MPS pressures were not available for measurement.

The left side of the ET was instrumented with 136 pressure orifices. These pressures were measured by means of 7 Scanivalve, Inc., S-type valve modules configured as one unit of 6 modules and one single. These valves were mounted internally in the tank. The left SRB had one gang of six S-type modules to measure 102 pressures. The right SRB was not instrumented. The pressure transducers used in the valve modules were Statham PM 131 TC differential pressure transducers, with ranges of ±10 psid, ±1 .5 psid and ±15 psid. Reference and calibration pressures were measured by the ARC micro manometers.

Some modifications were made to the model at the test site prior to

testing. These were as follows:

1. The forward tip of the ET containing the retro rocket package (Reference NR Drawing VL78-000018) was replaced with a flush 0.90 inch radius nose (Model scale). The new nose had five pressure taps; one in the nose and four more aft of the nose on the vertical and horizontal axis on a 0.315 inch radius.

2. The ET balance cavity was enlarged by one inch on the diameter (from 5 inches to 6 inches) to provide clearance for cable routing and eliminate balance interference.

3. The clearances around both the orbiter and the SRB struts were opened to approximately 1/8 inch to prevent interference.

4. An alternate rudder hinge pin was provided to give a rudder deflection of +15 degrees.

Before and during the tests various model discrepancies developed or were discovered. These were generally minor and had only a negligible, if any, effect on the data. Significant discrepancies are noted below:

1. Pressure orifices P171 and P173 on the OMS pod base were omitted.

2. During the test certain pressure taps developed leaks or became plugged. Data from these taps are questionable and should be used with caution. Difficulties in checking may have resulted in erroneous indications of leakage. Repairs were made to correct leaking or plugged pressure instrumentation, whenever possible, as the test progressed. The following list gives those taps that were indicated as bad on the various leak and response checks:

ARC Facility	Run Nos.	Orifice numbers with questionable pressure data
11'	2-4	72, 163, 427
↓	5-118	31, 100, 123, 163, 201, 427
	119-160	16, 98, 101, 107, 333, 427
	161-170	16, 98, 101, 107, 333, 427 + 306, 307, 327, 328, 336, 337, 356, 357, 375

CONFIGURATIONS INVESTIGATED (CONCLUDED)

ARC Facility	Run Nos.	Orifice numbers with questionable pressure data
11'	171-182	16, 47, 53, 75, 78, 98, 107, 201, 236, 237, 238, 307, 327, 365, 427
↓	183-189	Same as (171-182) + 7, 447, 525
↓	190-211	Same as (171-182)
8'x7'	220-234	20, 21, 24, 74, 326, 327, 336, 424, 427, 752, 868, 871
↓	235-285	74, 326, 327, 336, 424, 427, 752, 868, 871
↓	286-300	74, 107, 115, 124, 129, 138, 326, 327, 336, 427
↓	301-305	74, 326, 327, 336, 427
↓	306-333	74, 326, 327, 427
9'x7'	340-396	5, 325, 326, 327, 424, 427, 526, 752, 868, 871

TEST FACILITIES DESCRIPTION

Ames 11 x 11-Ft. Transonic

The Ames 11 x 11-Foot Transonic Wind Tunnel is a variable density, closed return, continuous flow type. This tunnel has an adjustable nozzle (two flexible walls) and a slotted test section to permit transonic testing over a Mach number range continuously variable from 0.4 to 1.4.

Ames 8 x 7-Ft. Supersonic

The Ames 8 x 7-Foot Supersonic Wind Tunnel is a closed-return, variable-density tunnel with a 8- by 7-foot rectangular test section. The nozzle has flexible side walls with fixed upper and lower surfaces. Mach number range is continuously variable from 2.45 to 3.5. Tunnel stagnation pressure can be varied from 0.3 to 2.0 atmospheres and Reynolds number per foot varies from 1.0×10^6 to 5.0×10^6.

Ames 9 x 7-Ft. Supersonic

The Ames 9 x 7-Foot Supersonic Wind Tunnel is a variable density, continuous flow type with an adjustable nozzle to permit supersonic testing over a Mach number range continuously variable from 1.5 to 2.5. The nozzle is of the asymmetric, sliding-block type in which the variation of the test section Mach number is achieved by translating, in the streamwise direction, the fixed-contour block that forms the floor of the nozzle.

DATA REDUCTION

Standard procedures were utilized to reduce force and pressure data to coefficient form. The following dimensional constants were applied:

Reference Dimensions and Constants (Model Scale)

$S_{Ref.} = 2.421\ ft^2$	Orbiter reference area
$\ell_{Ref.} = 39.849$ in.	Orbiter reference length

Base Areas (Model Scale)

$A_{BOI} = 0.1903\ Ft^2$	Orbiter base area, integrated
$A_{BOA} = 0.2362$	Orbiter base area, sting mounted
$A_{BMPSU} = 0.0417$	Orbiter upper MPS base area
$A_{BMPSL} = 0.0853$	Orbiter lower MPS base area
$A_{BACPS} = 0.0310$	Orbiter ACPS base area on OMS pod
$A_{BOMS} = 0.0231$	Orbiter OMS nozzle base area
$A_{BPOD} = 0.0257$	Orbiter OMS pod base area
$A_{CO} = 0.0611$	Orbiter sting cavity base area
$A_{BNOZ} = 0.0564$	SRM nozzle base area
$A_{BSKIRT} = 0.1729$	SRM nozzle skirt base area
$A_{BETI} = 0.3189$	ET Base area
$A_{CET} = 0.1964$	ET Sting cavity base area

TEST : OA12 / IA9 | TABLE I. | DATE : May, 1973

TEST CONDITIONS

MACH NUMBER	REYNOLDS NUMBER (per unit length)	DYNAMIC PRESSURE (pounds/sq. foot)	STAGNATION TEMPERATURE (degrees Fahrenheit)
0.6	4.0×10^6	540	120" NOM.
0.9	4.5	800	↓
1.1	4.0	800	
1.25	3.0	630	
1.4	3.0	650	
1.55	2.8	600	
2.0	2.3	490	
2.5	1.5	300	
3.0	2.0	350	
3.5	2.0	300	

BALANCE UTILIZED: FIVE (5) TASK CORPORATION BALANCES WITH CAPACITIES AS FOLLOWS:

	ISOLATED ORBITER		INTEGRATED VEHICLE		
	MK XX A	MK XX B	ORB MK XXV	SRB MK XX	ET MK II B
N_F	3000	3000	2400	1250	4000
N_A	3000	3000	2400	1250	4000
Y_F	1500	1500	1200	500	2000
Y_A	1500	1500	1200	500	2000
X	600	600	1500	200	1000
R	4000	4000	4000	1000	10,000
SIZE	2.5"	2.5"	2.5"	1.5"	4.0"

COMMENTS: THE MARK XX A, 2.5IN DIA. BALANCE WAS DAMAGED AFTER RUN 319. THE MARK XX B WAS SUBSTITUTED FOR RUN 320 AND SUBSEQUENT RUNS

TABLE II.

TEST: ARC 11-707 (TAPE)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: 4-27-78

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δ_e	δ_R	δ_{FR}	L_o	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 0.6	0.9	1.1	1.25	1.4	TEST RUN NUMBERS
RBMx01	$Z_{2A} + S_3 + T_9$	A	0	0	0	0	1.5	4	3	5	6	7		
02		A	0				0.5	5	8	18	28	38	48	
03		-8	B					4	9	19	29	39		
04		-6							10	20	30	40		
05		-4							11	21	31	41		
06		-2							12	22	32	42		
07		0						5	13	23	33	43	49	
08		2						4	14	24	34	44		
09		4							15	25	35	45		
10		6							16	26	36	46		
11		8							17	[illegible]	[illegible]	47		
12		-8	C		-5			2			97	102		
13		-6									118	111		
14		-4									98	103		
15		-2									117	12		
16		0									99	104		
17		2									116	113		
18		4									100	105		

1 7 13 19 25 31 37 43 49 55 61 67 75 76

α OR β SCHEDULES — COEFFICENTS

$\alpha A = -8, -6, -4, -2, 0, 2, 4, 6, 8$

$\beta B = -8, -6, -4, -2, 0, 2, 4, 6, 8$

$\beta C = -8, -4, 0, 4, 8$

IDVAR (1) IDVAR (2) NDV

TABLE II. CONTINUED

TEST: ARC - 11 - 707 (IF ?)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE:

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δ_e	δ_R	δ_{FR}	i_o	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 0.6	0.9	1.1	1.25	TEST RUN NUMBERS
RBMx 19	ϕ_{2A} + S_3 + T_7	6	C	0	-5	0	0.5	2			115	114	
20		8			-5						101	106	
21		-8			-10						60	69	
22		-6									61	70	
23		-4									62	71	
24		-2									63	72	
25		0									64	73	
26		2									65	74	
27		4									66	75	
28		6									67	76	
29		8									68	77	
30		-8			-15						78	85	
31		-6									79	89	
32		-4									80	90	
33		-2									81	91	
34		0									82	92	
35		2									83	93	
36		4									84	94	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

COEFFICENTS IDVAR (1) IDVAR (2) NDV

α OR β SCHEDULES

TABLE II. CONTINUED

TEST : ARC 11-707 (IAHM)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE :

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δ_e	δ_R	δ_{FR}	i_o	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 0.6	0.9	1.1	1.25	TEST RUN NUMBERS
RBMx 37	$\phi_{2A} + S_3 + T_9$	6	C	0	-15	0	0.5	2			85	95	
38		8			-15						87	96	
39		-8			-5						50	55	
40		-4									51	56	
41		0									52	57	
42		4									53	58	
43		8									54	59	
44		A	0	0			-1.2	4	107	108	109	110	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

COEFFICENTS IDVAR (1) IDVAR (2) NDV

α OR β SCHEDULES

TABLE II. CONTINUED

TEST: ARC 97-707 IA 25 — **DATA SET/RUN NUMBER COLLATION SUMMARY** — **DATE** 5-17-73

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δe	δR	lo	δRF	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 1.55	2.0	TEST RUN NUMBERS
250x 01	$\emptyset_{2A} + S_3 + T_9$	A	0	0	0	0.5	0	2	341	351	
02		8	B	"	"	"	"	"	342	360	
03		6	"						343	359	
04		4							344	358	
05		2							345	357	
06		0							346	356	
07		-2							347	355	
08		-4							348	354	
09		-6							349	353	
10		-8							350	352	
11		-9	C		-15				361	367	
12		-4	"		"				362	368	
13		0							363	369	
14		4							364	370	
15		6							365	371	
16		8							366	372	
17		-8			-10				373	379	
18		-4			-10				374	380	

1 7 13 19 25 31 37 43 49 55 61 67 75 73

IDVAR(1) IDVAR(2) NDV

α OR β SCHEDULES — COEFFICENTS

α(A) = -8, -6, -4, -2, 0, 2, 4, 6, 8

β(B) = 8, 6, 4, -4, -6, -8

β(C) = 8, 6, 4, 0, -4, -6, -8

TABLE II. CONTINUED

TEST: ARC 97-707(IA9B) — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE 5-17-73

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δ_e	PARAMETERS/VALUES δ_R	PARAMETERS/VALUES i_o	PARAMETERS/VALUES δ_{RF}	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 1.55	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 2.0	TEST RUN NUMBERS
RBB-19	$\phi_{2A} + S_3 + T_9$	0	C	0	-10	0.5	0	2	375	381	
20		4							376	382	
21		6							377	383	
22		8							378	384	
23		-8			+15				385	391	
24		-4							386	392	
25		0							387	393	
26		4							388	394	
27		6							389	395	
28		8							390	396	

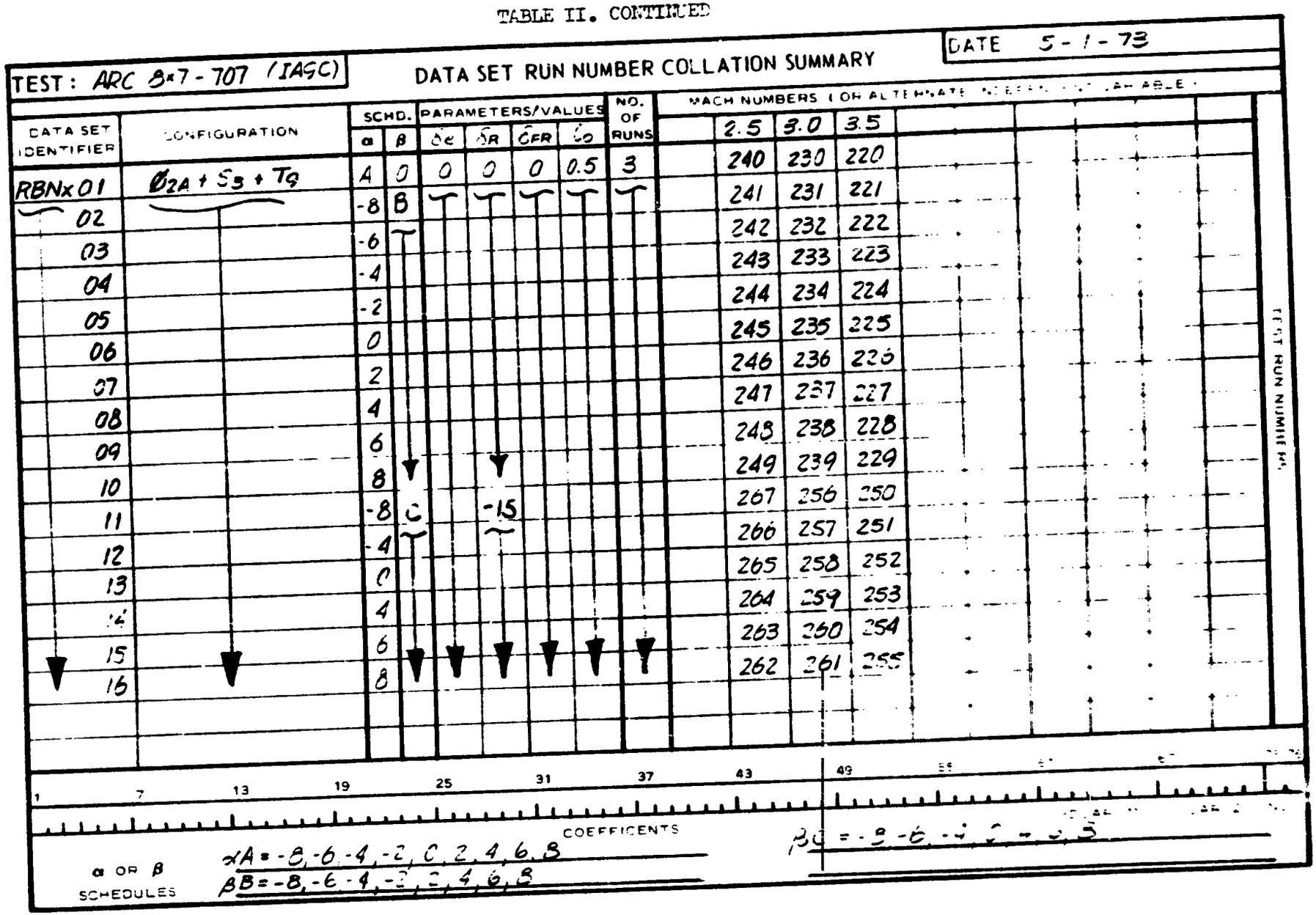
1 7 13 19 25 31 37 43 49 55 61 67 75 76

COEFFICENTS

IDENT (1) IDENT (2) NOTE

α OR β SCHEDULES

TABLE II. CONTINUED



TEST: ARC 8×7-707 (IASC)

DATA SET RUN NUMBER COLLATION SUMMARY

DATE 5-1-73

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	δ_e	δ_R	C_{FR}	C_D	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE NUMBERS IF APPLICABLE) 2.5	3.0	3.5
RBNx01	$\phi_{2A} + S_3 + T_9$	A	0	0	0	0	0.5	3	240	230	220
02		-8	B						241	231	221
03		-6							242	232	222
04		-4							243	233	223
05		-2							244	234	224
06		0							245	235	225
07		2							246	236	226
08		4							247	237	227
09		6							248	238	228
10		8							249	239	229
11		-8	C		-15				267	256	250
12		-4							266	257	251
13		0							265	258	252
14		4							264	259	253
15		6							263	260	254
16		8							262	261	255

FIRST RUN NUMBER

1 7 13 19 25 31 37 43 49

α OR β SCHEDULES

COEFFICIENTS

αA = -8, -6, -4, -2, 0, 2, 4, 6, 8

βB = -8, -6, -4, -2, 0, 2, 4, 6, 8

βC = -8, -6, -4, -2, 0, 2, 4, 6, 8

TABLE II. CONTINUED

TEST: ARC 8×7-707 (IA3C) — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE 5-1-73

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δ_e	δ_R	δ_{FR}	i_0	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 2.5	3.0	3.5	TEST RUN NUMBERS
RBNx17	$\emptyset_{24} + S_3 + T_9$	-8	C	0	-10	0	0.5	3	274	280*	268	
18		-4							275	281*	269	
19		0							276	282*	270	
20		4							277	283*	271	
21		6							278	284*	272	
22		8							279	285*	273	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

IDVAR (1) IDVAR (2) NCV

COEFFICENTS

α OR β SCHEDULES

* NOTE: RUNS 280-285: β SCHEDULE IS: -8, -4, 0, 4, 8

TABLE II. CONTINUED

TEST : AMES 11-707 (OA12A) — DATA SET RUN NUMBER COLLATION SUMMARY — DATE 4-23-73

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δ_e	PARAMETERS/VALUES δ_R	PARAMETERS/VALUES δ_{FR}	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 0.6	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 0.9	TEST RUN NUMBERS
RBPX01	$B_{10}C_5D_7N_2F_4M_3N_8V_5R_5W_{07}E_{10}$	A	0	0	0	0	2	119	125	
02		0	B					120	126	
03		5						121	127	
04		10						122	128	
05		15						123	129	
06		20						124	130	
07		0	C		-10			131	136	
08		5						132	137	
09		10						133	138	
10		15						134	139	
11		20						135	140	
12		0			-20			141	146	
13		5						142	147	
14		10						143	148	
15		15						144	149	
16		20						145	150	
17		0	D	10	0			151	156	
18		5	D	10	0			152	160	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

α OR β SCHEDULES

COEFFICENTS

IDVAR (1) IDVAR (2) NDI

α A = MAX, 0, 5, 10, 15, 20, 25

β B = -10, -5, 5, 10

β C = 8, -4, 0, 4, 8

β D = -10, 0, 10

β E = -5, 0, 5

TABLE II. CONTINUED

TEST: AMES 11-707 (OA12A) **DATA SET/RUN NUMBER COLLATION SUMMARY** **DATE:** 4-23-73

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δe	δR	δFR	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 0.6	0.9	TEST RUN NUMBERS
RBPx19	$B_{10}C_3D_7N_2F_4M_3N_8V_5R_5W_{87}E_{18}$	10	D	+10	0	0	2	153	157	
20		15						154	159	
21		20						155	158	
22		0	C	-10				161	166	
23		5						162	167	
24		10						163	168	
25		15						164	169	
26		20						165	170	
27		-4	E	-20				171	182	
28		0	C					172	181	
29		5						173	180	
30		10						174	179	
31		15						175	178	
32		20						176	177	
33		-4	E	0	0	40		183	189	
34		0	C					184	190	
35		5						185	191	
36		10						186	192	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

IDVAR (1) IDVAR (2) NDV

α OR β SCHEDULES — COEFFICENTS

α A = -MAX, 0, 5, 10, 15, 20, 25

β B = -10, -5, 5, 10

β C = -8, -4, 0, 4, 8

β D = -10, 0, 10 β E = -5, 0, 5

TABLE II. CONTINUED

TEST : AMES 11-707 (OA12A) — DATA SET RUN NUMBER COLLATION SUMMARY — DATE 4-23-73

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δ_e	δ_R	δ_{FR}	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 0.6	0.9	1.1	1.25	1.4	TEST RUN NUMBERS
RBPx37	$B_1C_3D_1N_2F_4H_6N_4V_8R_5W_{87}E_{18}$	15	C	0	0	40		187	193				
38		20	C			40		188	194				
39		F	O			0				199	197	195	
40		0.5	G							200	198	196	
41		-4	E		-10			201	202				
42		-4	E		-20			203	204				
43		-4	E	10	0	0		205	206				
44		-4	E	-10				207	208				
45		-4	E	0				210	209				
46		H	O					216	211				
47		-5	I					215	212				
48		-10	I					214	213				

1 7 13 19 25 31 37 43 49 55 61 67 73 76

α OR β SCHEDULES — COEFFICIENTS

α_F = -4.5, -3.5, -1.5, 0.5, 2.5, 4.5, 6.6, 8.6, 10, 15 α_H = 0, -5, -10, -15

β_G = -8, -4, -2, 0, 2, 4, 8 β_I = -10, -5, 0, 5

TABLE II. CONTINUED

TEST: 87-707 (0A12C) | DATA SET/RUN NUMBER COLLATION SUMMARY | DATE 5-7-73

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δe	δr	δFR	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE): 2.5	3.5	TEST RUN NUMBERS
RBQx01	$B_1\alpha C_5 C_7 M_2 F_4 M_3 N_8 V_5 R_5 W_{97} F_{10}$	A	0	0	0	40	2	290	286	
02		0	B					293	289	
03		10	C					292	288	
04		20	C					291	287	
05		0	D		-20			297	294	
06		10						298	295	
07		20						299	296	
08		0		10	0			303	300	
09		10						304	301	
10		20						305	302	
11		0		-20				309	306	
12		10						310	307	
13		20						311	308	
14		0		-40				317	314	
15		10						318	315	
16		20						319	316	
17		E	0	″				322	320	
18		30	D	0				323	321	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

α OR β SCHEDULES — COEFFICENTS — IDVAR (1) — IDVAR (2) — NDV

αA = 0, 5, 10, 15, 20

βB = 3, -3

βC = 6, 3, -3, -6

βD = 6, 3, 0, -3, -6

αE = 15, 20, 25, 30, 35, 40

TABLE II. CONCLUDED

TEST: 87-707 (ØA12C) — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE 5-9-73

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δe	δR	δFR	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 2.5	3.5	TEST RUN NUMBERS
RBQx 19	B_{1D-6} O_1 N_2 F_4 M_{13} M_9 I_{SR} W_{17} F_{19}	30	D	0	-20	40	2	325	324	
20		30	D	10	0	40		327	326	
21		30	D	-20	0	40		329	328	
22		20	F	0	0	40		332	330	
23		15	G	0	0	40		333	331	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

α OR β SCHEDULES — COEFFICENTS

δF = 10, 6, 0, -6, -10

δS = 6, 0, -6

ID/VAR (1) PLAR 2 NO.

TABLE III. MODEL COMPONENT DIMENSIONAL DATA

MODEL COMPONENT: B10 Body

GENERAL DESCRIPTION: Fuselage, 2A Configuration, Lightweight Orbiter, per Rockwell Lines VL70-000089 "B."

Scale Model = .030

DRAWING NUMBER: VL70-000089 "B"
VL70-000092, 93, 94 "A"

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Length ~IN	1328.3	39.849
Max. Width ~IN ($@X_o$ = 1528.3)	265.0	7.9500
Max. Depth ~IN. ($@X_o$ = 1480.52)	248.0	7.4400
Fineness Ratio	5.012	5.012
Area ~Ft^2		
Max. Cross-Sectional	456.4	.41076
Planform		
Wetted		
Base		

TABLE III. (CONTINUED)

MODEL COMPONENT: Canopy - C5

GENERAL DESCRIPTION: 2A Configuration per Lines VL70-000092

Scale Model = .030

DRAWING NUMBER: VL70-000092

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Length (STA FWD Bulkhead)	391.0	11.730
Max. Width (T.E. Bulkhead)	560.0	16.800
Max. Depth (WP = 42.9 22 to = 500)		
Fineness Ratio		
Area		
Max. Cross-Sectional		
Planform		
Wetted		
Base		

TABLE III. (CONTINUED)

MODEL COMPONENT: Manipulator Housing D-7

GENERAL DESCRIPTION: 2A Configuration per Rockwell Lines VL70-000093

Scale Model = .030

DRAWING NUMBER: VL70-000093

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Length ~ IN.	881.00	26.430
Max. Width ~ IN.	51.00	1.530
Max. Depth ~ IN.	23.00	.690
Fineness Ratio		
Area		
Max. Cross-Sectional		
Planform		
Wetted		
Base		

℄ Fuselage BP = 0.00

WP = 500.0 IN. FS

X.426.0 to 1307.0 IN. FS

TABLE III. (CONTINUED)

MODEL COMPONENT: WING-W87 New Light Weight Orbiter

GENERAL DESCRIPTION: Orbiter Configuration Per Lines VL70-000093.

NOTE: (Dihedral Angle is defined at the lower surface of the Wing at the 75.33% element line projected into a plane perpendiculary.

Scale Model = .030

TEST NO.

DWG. NO. VL70-000093

DIMENSIONS:	FULL-SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo.) Ft^2 Planform	2690.00	2.42100
Span (Theo In.	936.68	28.10040
Aspect Ratio	2.265	2.265
Rate of Taper	1.177	1.177
Taper Ratio	0.200	0.2000
Dihedral Angle, degrees	3.5000	3.500
Incidence Angle, degrees	3.000	+3.00
Aerodynamic Twist, degrees	3.500	+3.000
Sweep Back Angles, degrees		
Leading Edge	45.00	45.00
Trailing Edge	-10.24	-10.24
0.25 Element Line	35.209	35.209
Chords:		
Root (Theo) B.P.0.0.	689.24	20.67720
Tip, (Theo) B.P. 46834	137.85	4.13550
MAC	474.81	14.24430
Fus. Sta. of .25 MAC	1136.89	34.10670
W.P. of .25 MAC	299.20	8.97840
183.13 B.L. of .25 MAC	182.13	5.46390
EXPOSED DATA		
Area (Theo) Ft^2	1752.29	1.57706
Span, (Theo) In. BP108 to 468.341	720.68	21.62040
Aspect Ratio	2.058	2.058
Taper Ratio	.2451	.2451
Chords		
Root BP108	562.40	16.8720
Tip 1.00 $\frac{b}{2}$	137.85	4.13550
MAC	393.03	11.79090
Fus. Sta. of .25 MAC	1185.31	35.55930
W.P. of .25 MAC	300.207	9.00621
B.L. of .25 MAC	143.76	4.31280
Airfoil Section (Rockwell Mod NASA) XXXX-64		
Root $\frac{b}{2}$ = .425	.10	.10
Tip $\frac{b}{2}$ = 1.00	.12	.12
Data for (1) of (2) Sides		
Leading Edge Cuff Planform Area Ft^2	120.33	.10830
Leading Edge Intersects Fus M. L. @ Sta	560.0	16.80
Leading Edge Intersects Wing @ Sta	1035.0	31.050

TABLE III. (CONTINUED)

MODEL COMPONENT: Elevon E-18

GENERAL DESCRIPTION: 2A Configuration Per W-87 Rockwell Lines VL 70-000093

Data for (1) of (2) Sides

Scale Model = .030

DRAWING NUMBER: VL 70-000093

DIMENSIONS:		FULL-SCALE	MODEL SCALE
Area ~	Ft^2	205.52	.18497
Span (equivalent) ~	IN.	353.34	10.60020
Inb'd equivalent chord		114.78	3.44340
Outb'd equivalent chord		55.00	1.6500
Ratio movable surface chord/ total surface chord			
At Inb'd equiv. chord		.208	.208
At Outb'd equiv. chord		.400	.400
Sweep Back Angles, degrees			
Leading Edge		0.00	0.00
Tailing Edge		-10.24	-10.24
Hingeline		0.00	0.00
Area Moment (Normal to hinge line) Product of Area Moment	Ft^3	1548.07	.04180

TABLE III. (CONTINUED)

MODEL COMPONENT: VERTICAL - V5 (Light Weight Orbiter Configuration)

GENERAL DESCRIPTION: Centerline Vertical Tail, Double Wedge Airfoil with Rounded Leading Edge

Scale Model = .030

DRAWING NUMBER: VL70-000095

DIMENSIONS:	FULL-SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo) Ft^2 Planform	413.25	.37192
Span (Theo) In	315.72	9.47160
Aspect Ratio	1.675	1.675
Rate of Taper	0.507	0.507
Taper Ratio	.404	.404
Sweep Back Angles, degrees		
Leading Edge	45.000	45.000
Trailing Edge	26.249	26.249
0.25 Element Line	41.130	41.130
Chords:		
Root (Theo) WP	268.50	8.05500
Tip (Theo) WP	108.47	3.25410
MAC	199.81	5.99430
Fus. Sta. of .25 MAC	1463.50	43.90500
W. P. of .25 MAC	635.522	19.06566
B. L. of .25 MAC	0.00	0.00
Airfoil Section		
Leading Wedge Angle Deg	10.000	10.000
Trailing Wedge Angle Deg	14.920	14.920
Leading Edge Radius IN.	2.00	.06
Void Area Ft^2	13.17	.01185
Blanketed Area Ft^2	12.67	.01140

TABLE III. (CONTINUED)

MODEL COMPONENT: R-5 Rudder

GENERAL DESCRIPTION: ZA Configuration per Rockwell Lines VL 70-000095

Scale Model = .030

DRAWING NUMBER: VL 70-000095

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Area ~ Ft^2	106.38	.09571
Span (equivalent) ~ IN.	201.0	6.030
Inb'd equivalent chord	91.585	2.74755
Outb'd equivalent chord	50.833	1.52499
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	0.400	0.400
At Outb'd equiv. chord	0.400	0.400
Sweep Back Angles, degrees		
Leading Edge	34.83	34.83
Tailing Edge	26.25	26.25
Hingeline	34.83	34.83
Area Moment (Normal to hinge line) ~ Ft^3 Product of Area and Mean Chord	526.13	.01421

TABLE III. (CONTINUED)

MODEL COMPONENT: OMS Pod -M3

GENERAL DESCRIPTION: 2A Light Weight Configuration per Rockwell Lines VL70-000094A

Scale Model = .030

DRAWING NUMBER: VL70-000094A

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Length	346.0	10.380
Max. Width X_{-} = 1450.0	108.0	3.240
Max. Depth X_{o} = 1500.0	113.0	3.390
Fineness Ratio		
Area		
Max. Cross-Sectional		
Planform		
Wetted		
Base		

℄ of OMS Pod

WP = 463.9 IN. FS WP 400 + 63.9 = 463.9

BP = 80.0 IN. FS

Length 1214.0 to 1560.0' = 346.0 IN. FS

TABLE III. (CONTINUED)

MODEL COMPONENT: F4 Body Flap

GENERAL DESCRIPTION: 2A Configuration per Rockwell Lines VL70-000094A

Scale Model = .030

DRAWING NUMBER: VL70-000094A

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Length	84.70	2.541
Max. Width	265.00	7.950
Max. Depth		
Fineness Ratio		
Area ~ Ft^2		
Max. Cross-Sectional		
Planform	142.64	.12838
Wetted		
Base Ft^2	38.65	.03478

TABLE III. (CONTINUED)

MODEL DIMENSIONAL DATA

MODEL COMPONENT : S3-Booster Solid Rocket Motor

GENERAL DESCRIPTION : A Configuration Per Rockwell Lines VL77-000012 & VL77-000061 "B"

Body of Revolution; Data for (1) of (2) Sides

Scale Model = .030

DRAWING NUMBER : VL 77-000012

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length ~IN.	1732.0	51.96
Max Width (DIA) IN. BSRM Tank	142.0	4.260
Max Depth (DIA) Aft Skirt	259.0	7.77
Fineness Ratio L/D	6.687	6.687
Area ~ Ft^2		
Max. Cross-Sectional (Aft Skirt)	365.87	.32928
Planform		
Wetted		
Base		

Ref.

FS (Orbiter) = 0.00 = 747.99 IN. ET = 200.0 IN. BSRM

WP (BSRM) = WP 400(Orbiter) - 344.413 = 55.587 IN.

BP (Orbiter) = 0.00 = 243.0 IN. BSRM

TABLE III. (CONCLUDED)

MODEL COMPONENT: EXTERNAL TANK - T9

GENERAL DESCRIPTION: 2A Configuration

NOTE: T9 identical to T8 W/O retro pkg., nose w/30"R F.S.

DRAWING NUMBER NONE

DIMENSION:	FULL SCALE	MODEL SCALE
Length - IN.	1858	55.740
Max Width (Dia) - IN.	324.0	9.720
Max Depth		
Fineness Ratio L/D	5.73457	5.73457
Area - FT^2		
Max Cross-Sectional	572.56	0.51530
Planform		
Wetted		
Base		
Nose, Radius, IN.	30.0	

ORBITER BODY

ORBITER STATION ~ X_o			RADIAL LOCATION θ ~ DEGREES																
FULL	MODEL	X_o/ℓ_o	0	20	40	55	70	90	105	110	120	135	142	150	157	162	165	169	172	180
200	6.00	0	20																	
210	6.30	.008	21					22												23
225	6.75	.019	24	25	26	27	28	29			30			31						32
245	7.35	.034	33	34	35	36	37	38			39			40						41
280	8.40	.060	42	43	44	45	46	47			48			49						50
380	11.40	.136	51	52	53	54	55	56			57			58						59
400	12.00	.151																	60	
410	12.30	.158													61					
430	12.90	.173	62	63	64	65	66	67			68			69		70		71		72
460	13.80	.196											73							
500	15.00	.226	74	75	76	77	78	79			80			81			82			83
560	16.80	.271	84		85		86	87			88			89			90			91
625	18.75	.320	92		93		94	95			96			97			98			99
725	21.75	.395	100		101		102	103			104			105			106			107
880	26.40	.512	108		109		110	111			112			113			114			115
980	29.40	.587	116		117															
1080	32.40	.662			118		119	120			121			122			123			124
1180	35.40	.738					125	126			127			128						129
1245	37.35	.787			130		131	132	133		134	135		136			137			138
1300	39.00	.828			139		140	141	142		143	144		145			146			
1375	41.25	.885			147		148	149	150		151	152		153			154			
1430	42.90	.926			155		156	157	158		159	160		161			162			
1480	44.40	.964	163				164	165	166		167	168		169			170			
1530[a]	45.90	1.001								171	173									
1530[b]	45.90	1.001								172	174									

a OMS POD, INSIDE

b OMS POD, OUTSIDE

a. Orbiter body

Table IV. Pressure Orifice Locations

ORBITER BASE

LOCATION	ORIFICE NUMBERS
ORBITER BASE (INTEGRATED)	1, 2, 3, 4
LEFT MPS NOZZLE BASE	5
UPPER MPS NOZZLE BASE	6
ACPS BASE AREA ON OMS POD	7
OMS NOZZLE BASE	8
OMS POD BASE	9
ORBITER BASE (STING MOUNT)	11, 12, 13, 14
ORBITER STING CAVITY	15, 16

BODY FLAP LWR SURFACE

ORB. STA. ~ X_o		θ ~ DEG	
FULL	MODEL	0	40
1580	47.40	175	176

MPS NOZZLE

X ~ IN. FWD BASE		θ ~ DEG					
FULL	MODEL	0	90	135	180	225	270
25	0.75	181	182	183	184	185	186
50	1.50	187	188	189	190	191	192
75	225		193	194	195	196	197

OMS NOZZLE

X ~ IN FWD BASE		θ ~ DEG		
FULL	MODEL	135	180	225
10	0.30	177	178	179
20	0.60		180	

VERTICAL TAIL

WATER PLANE ~ Z_o				X/C ~ THEORETICAL VERTICAL CHORD							
FULL	MODEL	η_v		0	.05	.15	.30	.52	.65	.775	.90
525	15.75	.079		400							
550	16.50	.158	L	410	411	412	413	414	415	416	
			R		511	512	513	514	515	516	
600	18.00	.316	L	420	421	422	423	424	425	426	427
			R		521	522	523	524	525	526	527
690	20.70	.60	L	430	431	432	433	434	435	436	437
			R		531	532	533	534	535	536	537
765	22.95	.84	L	440	441	442	443	444	445	446	447
			R		541	542	543	544	545	546	547
792	23.76	.925	L	450	451	452	453	454	455	456	457
			R		551	552	553	554	555	556	557

b. Orbiter Base, Body Flap Lower Surface, and Vertical Tail

Table IV. Continued.

ORBITER WING

ORBITER B.P. - Y_o				X/C - THEORETICAL WING CHORD																			
FULL	MODEL	η		-.49	-.35	-.25	-.15	-.033	0.0	.05	.15	.25	.40	.55	.60	.65	.70	.725	.75	.775	.80	.85	.90	.95
140	4.20	.299	U	200	201		202			203		204		205					206		207	208		209
			L		301		302			303		304		305					306		317	308		309
170	5.10	.364	U			210	211			212														
			L				311			312														
200	6.00	.427	U					220		221	222		223	224					225		226	227	228	229
			L							321	322		323	324					325		326	327	328	329
250	7.50	.534	U						230	231	232	233	234	235				236		237		238	239	240
			L							331	332	333	334	335				336		337		338	339	340
315	9.45	.673	U						250	251	252	253	254	255			256			257		258		259
			L							351	352	353	354	355			356			357		358		359
365	10.95	.780	U						260	261	262	263				264			265			266		267
			L							361	362	363				364			365			366		367
415	12.45	.887	U						270	271	272	273	274		275				276				277	
			L							371	372	373	374		376				376				377	

U - UPPER SURFACE L - LOWER SURFACE

η	X/C LOCAL WING CHORD
.299	0, .094, .229, .362, .497, .700, .834, .865, .900, .965
.364	0, .086, .246
.427	0, .081, .177, .402, .565, .760, .808, .857, .905, .953
.534	SAME AS THEORETICAL CHORD
.673	
.780	
.887	

c. Orbiter Wing

Table IV. Continued.

EXTERNAL TANK

TANK STA ~ XT			θ ~ DEG									
FULL	MODEL	XT/LT	0	30	60	90	120	135	150	165	180	270
316.	9.48	0	610									
317.7	9.53	.001	611			614					619	620
400	12.00	.045	621	622	623	624	625		627		629	
520	15.60	.110	631	632	633	634	635		637	638	639	
640	19.20	.174	641	642	643	644	645		647	648	649	
670	20.10	.191	651	652	653	654	655		657	658	659	
710	21.30	.212	661	662	663	664	665		667	668	669	
750	22.50	.234	671	672	673	674	675	676	677	678	679	
850	25.50	.287	681	682	683	684	685		687	688	689	
950	28.50	.341	691	692	693	694	695	696	697	698	699	
1050	31.50	.395	701	702	703	704	705		707	708	709	
1150	34.50	.449	711	712	713	714	715	716	717		719	
1250	37.50	.503	721	722	723	724	725		727	728	729	
1350	40.50	.557	731	732	733	734	735	736	737		739	
1500	45.00	.637	741	742	743	744	745		747	748	749	
1700	51.00	.745	751	752	753		755	756	757		759	
1900	57.00	.853	761	762	763		765	766	767	768		
2040	61.20	.929	771	772	773	774	775	776	777	778		
STING CAVITY BASE			601 602			603					604	

d. External Tank

Table IV. Continued.

LEFT SRM

SRM STATION ~ XS			θ ~ DEG							
FULL	MODEL	XS/ℓS	0	45	90	135	180	225	270	315
200	6.00	0	810							
260	7.80	.034	811	812	813	814	815	816	817	818
370	11.10	.097	821	822	823	824	825	826	827	828
400	12.00	.114	831	832	833	834	835	836	837	838
450	13.50	.142	841	842	843	844	845	846	847	848
550	16.50	.199	851	852	853	854	855	856	857	858
700	21.00	.284	861		863		865	866	867	868
850	25.50	.370	871		873		875		877	
1050	31.50	.484	881		883		885			
1250	37.50	.597	891		893		895			
1450	43.50	.711	901		903		905		907	
1650	49.50	.825	911		913		915		917	
1750	52.50	.882	921	922	923	924	925	926	927	928
1790	53.70	.904	931	932	933	934	935	936	937	938
1850	55.50	.939	941	942	943	944	945	946	947	948
1900	57.00	.967	951	952	953	954	955	956	957	958
NOZZLE BASE			801							
SKIRT BASE			802		803		804		805	

e. Left SRM

Table IV. Concluded.

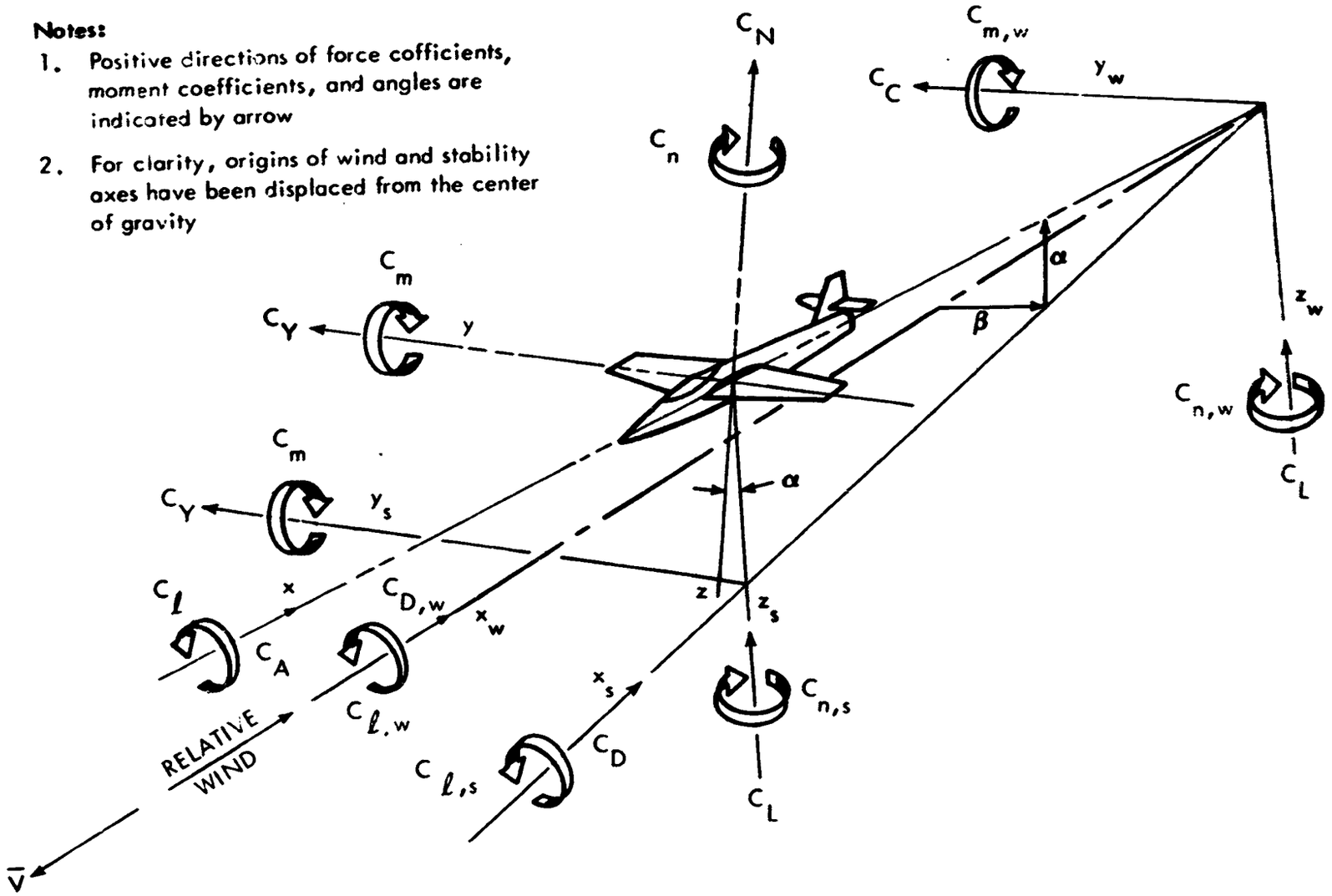
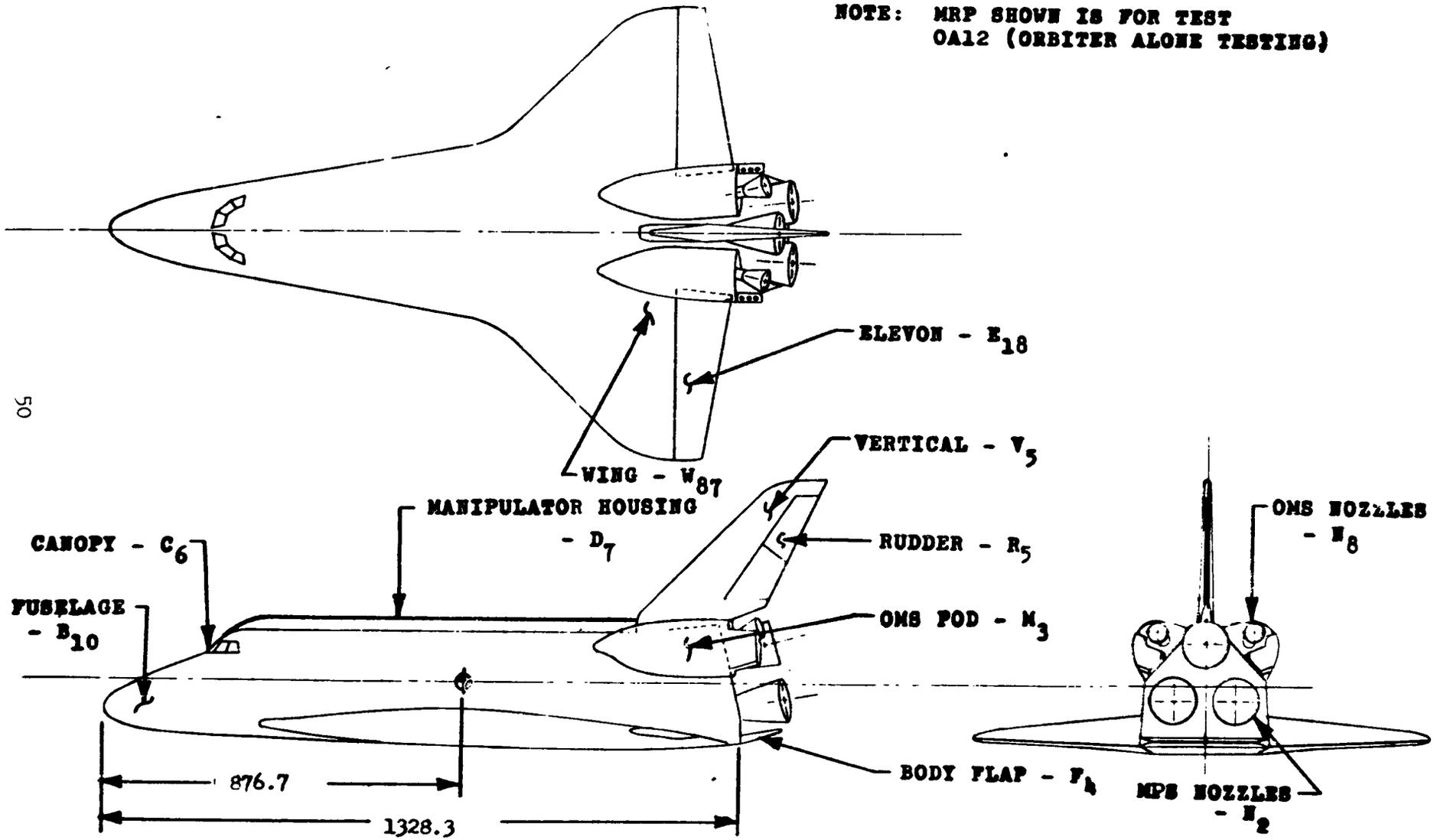
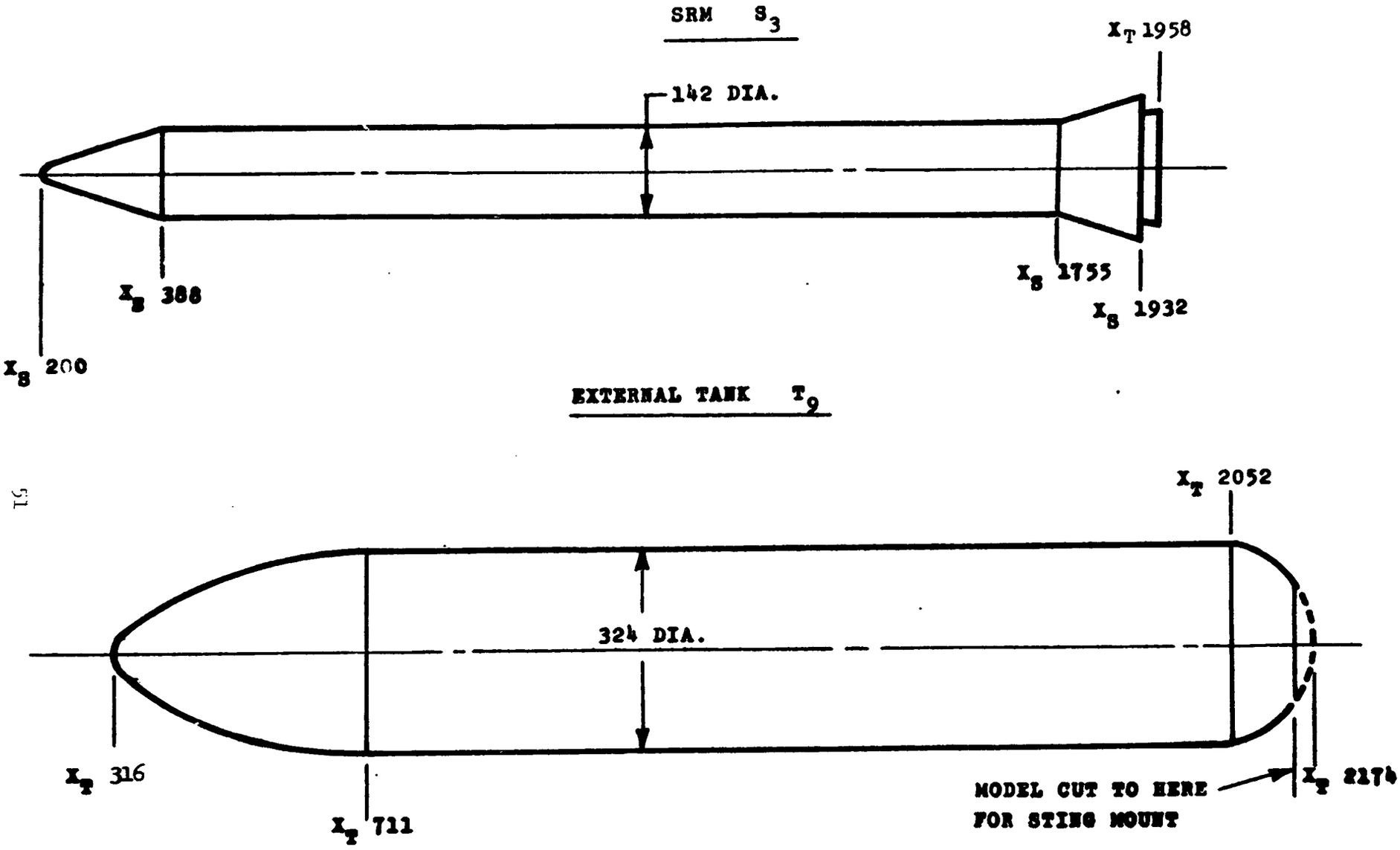


Figure 1. - Axis Systems.



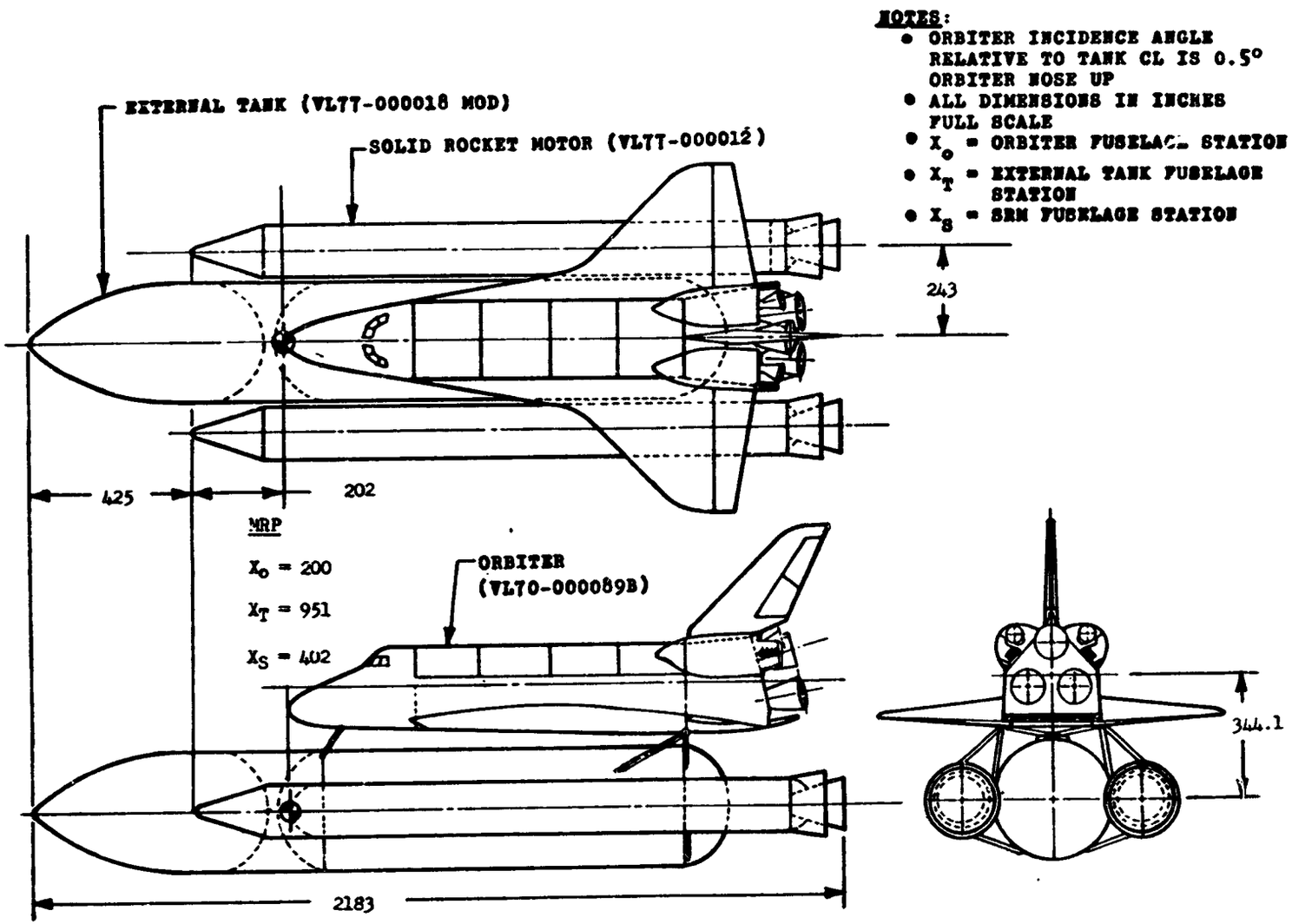
a. Orbiter, O_{2A}

Figure 2. - Model Sketches.



b. SRM, S_3, and External Tank, T_9

Figure 2. - Continued.

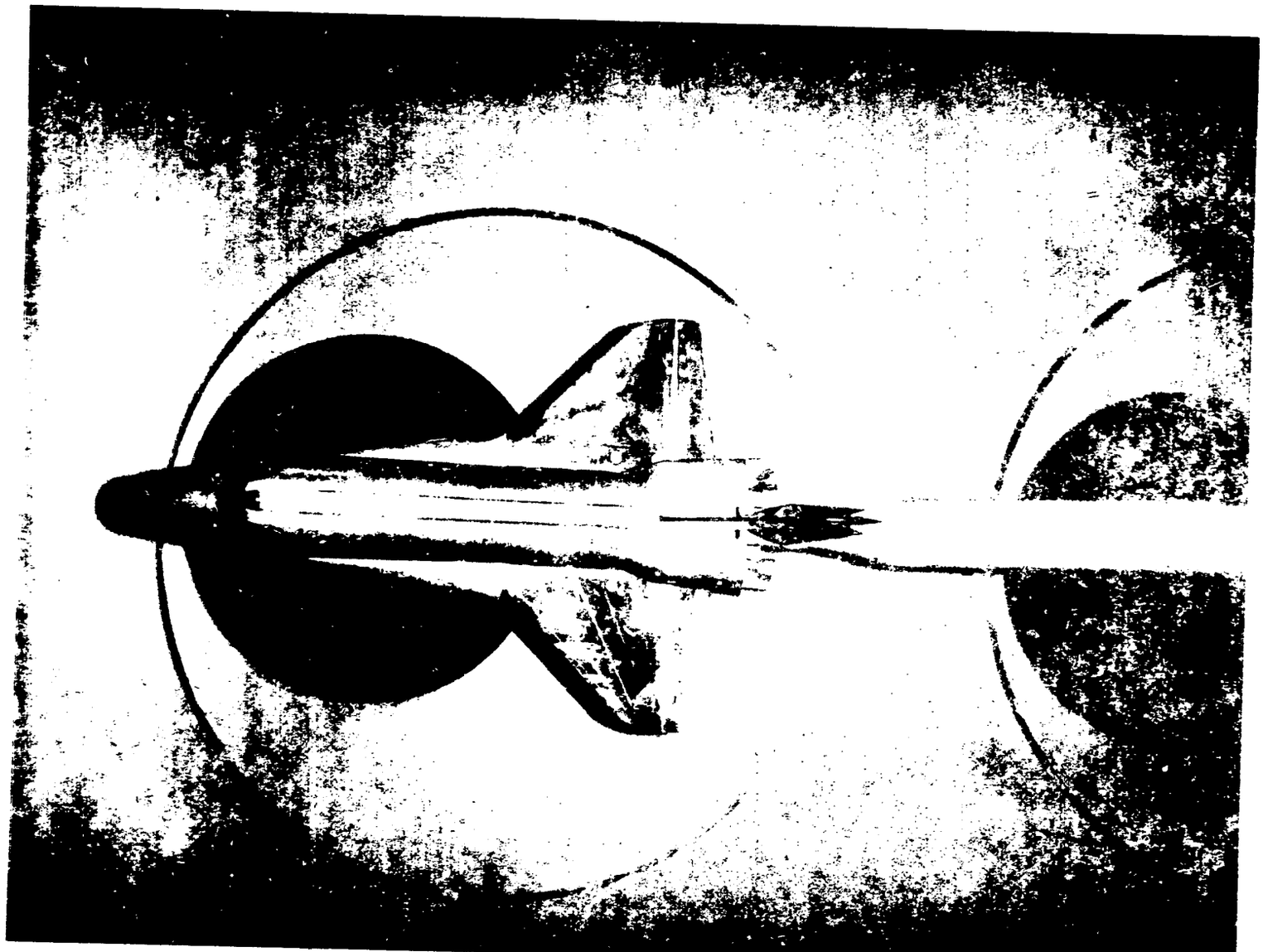


c. Integrated Vehicle

Figure 2. - Concluded.



a.



b. Isolated Orbiter (Entry Configuration) Mounted in the ARC 8x7 Ft. Tunnel
Figure 3. - Concluded

TABULATED PRESSURE DATA

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB01) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

BETA = .000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

MACH (1) .600 ALPHA (1) = -4.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.0630	.1910	.0000	-.9070	-.1580	-.0760			-.0830		-.0860	-.0720	-.0490	-.0440	-.0460
20.000	1.0630		-.1610	-.8260	-.1930	-.0960			-.0970		-.1080				
40.000	1.0630		-.4560	-.6580	-.2130	-.1910			-.1980		-.2350	-.1780	-.1030	-.0700	-.0500
55.000	1.0630		-.3180	-.5250	-.1320	-.0840			-.0970		-.1360				
70.000	1.0630		-.2290	-.4210	-.0970	-.0410			-.0820		-.1610	-.3730	-.0630	.0220	.0390
90.000	1.0630	.5285	-.1400	-.3350	-.0620	-.0610			-.1180		-.1870	-.3920	-.0760	.0030	.0260
105.000	1.0630														
110.000	1.0630								-.2150		-.2090	-.2550	-.0750	-.0140	.0210
120.000	1.0630		.0550	-.0920	.0600	.0250									
135.000	1.0630									-.3890					
142.000	1.0630								-.0980		-.3780	-.1450	-.0640	-.0180	.0190
150.000	1.0630		.1950	.1130	.2200	.3500		.2400							
157.000	1.0630								-.1830						
162.000	1.0630										-.3760	-.1410	-.0760	-.0130	.0090
165.000	1.0630								-.1350						
169.000	.0000						.6570								
172.000	1.0630								.2490		-.4580	-.1120	-.0960	-.0240	.0150
180.000	1.0630	.7470	.1930	.1940	.2780	.5930									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0000							-.1230		-.1480
40.000	-.0390	-.1610		-.2020	-.2190	-.2230	-.1640			-.1560
70.000		-.0350	-.0810	-.0910	-.0170	-.0550	-.0400	-.0710		
90.000		-.0020	-.0190	-.0660	-.0560	-.0970	-.0850	-.0980		
105.000				-.0680	-.1410	-.1210	-.1090	-.1290		
110.000									-.2190	
120.000		.0220	.1280	-.0200	-.4030	-.1990	-.1140	-.1130	-.1770	
135.000				.4540	-.0180	-.2210	-.1380	-.1510		
150.000		.0450	.1630	.3350	.0800	-.1540	-.1410	-.1800		
165.000		.0460		.2630	.2020	-.1120	-.1530	-.1800		
180.000		.0450	.1310	.1660						

AMES 11-7D7 OA12 OPA ORBITER FUSELAGE (RBPBU1)

MACH (1) = .999 ALPHA (2) = .030

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0525	.4110	.0000	-.7120	-.1020	-.0370			-.0440		-.0560	-.0410	-.0250	-.0130	-.0060
25.000	1.0525		-.4050	-.6300	-.1200	-.0470			-.0470		-.0680				
45.000	1.0525		-.2500	-.4980	-.1160	-.0830			-.0850		-.1330	-.1020	-.0380	-.0150	.0090
55.000	1.0525		-.1770	-.4090	-.0510	-.0090			-.0360		-.0920				
70.000	1.0525		-.1430	-.3410	-.0490	-.0010			-.0460		-.1400	-.3800	-.0820	-.0160	-.0230
90.000	1.0525	.5620	-.1280	-.3070	-.0050	-.0060			-.0660		-.1730	-.4210	-.0870	-.0210	-.0160
105.000	1.0525														
110.000	1.0525														
120.000	1.0525		-.0260	-.1360	.0630	.0620			-.1410		-.2500	-.2720	-.0860	-.0300	-.0090
135.000	1.0525														
142.000	1.0525									-.4460					
150.000	1.0525		.0400	.0120	.1580	.3260			-.1570		-.4560	-.1710	-.0810	-.0360	-.0120
157.000	1.0525							.2050							
162.000	1.0525								-.2940						
165.000	1.0525										-.4350	-.1520	-.0770	-.0350	-.0200
169.000	1.0525								-.2770						
172.000	1.0525						.6030								
180.000	1.0525	.5980	-.0010	.0700	.1930	.5420			.1370		-.5120	-.1420	-.1080	-.0460	-.0090

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0160							-.1130		-.1490
40.000	.0000	-.0650		-.1370	-.1700	-.1960	-.1460			-.1560
75.000		-.1320	-.1560	-.1350	-.0270	-.0610	-.0400	-.0650		
90.000		-.0840	-.0730	-.0850	-.0760	-.1030	-.0820	-.0950		
105.000				-.0800	-.1390	-.1280	-.1120	-.1270		
110.000									-.2050	
120.000		-.0370	.0910	.0320	-.3610	-.1920	-.1070	-.1060	-.1580	
135.000				.4110	-.0500	-.2140	-.1260	-.1360		
150.000		.0010	.1280	.2450	.0060	-.1870	-.1540	-.1770		
165.000		.0050		.2090	.1350	-.1420	-.1720	-.1780		
180.000		.0060	.0880	.1150						

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBPBU1)

MACH (1) = .600 ALPHA (3) = 5.030

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0470	.6290	.0000	-.4830	-.0290	.0210			.0120		-.0100	.0020	.0190	.0320	.0490
20.000	1.0470		-.1440	-.4340	-.0340	.0190			.0150		-.0180				
40.000	1.0470		-.0500	-.3380	-.0150	.0240			.0080		-.0680	-.0540	.0050	.0260	.0640
55.000	1.0470		-.0320	-.3050	.0050	.0260			-.0010		-.0790				
70.000	1.0470		-.0760	-.2890	-.0320	.0220			-.0240		-.1320	-.4010	-.1330	-.0670	-.1110
90.000	1.0470	.5630	-.1440	-.2990	.0140	.0240			-.0390		-.1720	-.4640	-.1260	-.0680	-.0920
105.000	1.0470														
110.000	1.0470														
120.000	1.0470		-.1610	-.2010	.0450	.0780			-.0710		-.3220	-.3150	-.1200	-.0710	-.0650
135.000	1.0470														
142.000	1.0470									-.5020					
150.000	1.0470		-.1560	-.1230	.0890	.3010			-.2280		-.5670	-.2000	-.1000	-.0580	-.0460
157.000	1.0470							.1740							
162.000	1.0470								-.4030						
165.000	1.0470										-.4850	-.1770	-.0840	-.0540	-.0490
169.000	1.0470								-.4270						
172.000	1.0470						.5490								
180.000	1.0470	.4000	-.2280	-.0750	.1000	.4860			.0100		-.5490	-.1590	-.1180	-.0590	-.0420

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0460							-.0930		-.1420
40.000	.0780	.0380		-.0550	-.1040	-.1540	-.1190			-.1430
70.000		-.2630	-.2450	-.1790	-.0360	-.0670	-.0410	-.0630		
90.000		-.1950	-.1380	-.1120	-.0870	-.1140	-.0840	-.0920		
105.000				-.0840	-.1330	-.1350	-.1150	-.1280		
110.000									-.1920	
120.000		-.1100	.0460	.0740	-.3140	-.2000	-.1120	-.1000	-.1570	
135.000				.3220	-.0890	-.2320	-.1390	-.1400		
150.000		-.0540	.0790	.1760	-.0620	-.2160	-.1670	-.1870		
165.000		-.0420		.1430	.0690	-.1700	-.1830	-.1680		
180.000		-.0390	.0410	.0440						

AMES 11-7D7 OA12 02A ORBITER FUSELAGE (RBPBU1)

MACH (1) = .600 ALPHA (4) = 10.040

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	1.0110	.7950	.0000	-.2740	.0690	.0960			.0880		.0590	.0610	.0800	.0940	.1210
20.000	1.0110		.1100	-.2290	.0680	.0930			.0890		.0490				
40.000	1.0110		.1360	-.1760	.0750	.0990			.0790		-.0390	-.0490	.0170	.0640	.1230
55.000	1.0110		.0830	-.2200	.0250	.0050			-.0180		-.0940				
70.000	1.0110		-.0280	-.2660	-.0630	.0210			-.0260		-.1510	-.4460	-.2070	-.1520	-.2480
90.000	1.0110	.5270	-.1830	-.3270	.0050	.0240			-.0350		-.1930	-.5320	-.2110	-.1590	-.1880
105.000	1.0110														
110.000	1.0110														
120.000	1.0110		-.3010	-.2910	.0150	.0770			-.0130		-.4210	-.3720	-.1770	-.1370	-.1410
135.000	1.0110														
142.000	1.0110									-.5690					
150.000	1.0110		-.3420	-.2760	.0230	.2770			-.2970		-.6660	-.2310	-.1200	-.0840	-.1930
157.000	1.0110							.1440							
162.000	1.0110								-.5110						
165.000	1.0110										-.5020	-.1950	-.0970	-.0710	-.0820
169.000	1.0110								-.5720						
172.000	1.0110						.4930								
180.000	1.0110	.1790	-.4460	-.1650	.0250	.4360			-.1110		-.5630	-.1660	-.1110	-.0710	-.0540

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1350							-.0680		-.1240
40.000	.1540	.1420		.0380	-.0240	-.0950	-.0810			-.1330
70.000		-.4390	-.3530	-.2550	-.0860	-.0950	-.0530	-.0560		
90.000		-.3180	-.2280	-.1680	-.1340	-.1230	-.0910	-.0830		
105.000				-.1340	-.1380	-.1490	-.1210	-.1230		
110.000									-.1960	
120.000		-.1860	.0090	.0850	-.3180	-.2100	-.1170	-.1000	-.1560	
135.000				.2420	-.1390	-.2510	-.1550	-.1490		
150.000		-.1220	.0070	.1560	-.1220	-.2370	-.1900	-.1890		
165.000		-.0980		.0760	.0640	-.2080	-.1930	-.1730		
180.000		-.0750	.0010	.0030						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7D7 OA12 OEA ORBITER FUSELAGE (RBPBU1)

MACH (1) = .900 ALPHA (5) = 15.020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9480	.9220	.0000	-.0800	.1800	.1840			.1700		.1420	.1430	.1590	.1770	.2060
20.000	.9480		.3320	-.0290	.1820	.1820			.1710		.1310				
40.000	.9480		.2970	-.0260	.1400	.1480			.1060		-.0490	-.0840	.0160	.1070	.1870
55.000	.9480		.1670	-.1540	.0010	-.0710			-.0790		-.1370				
70.000	.9480		-.0160	-.2750	-.1380	-.0120			-.0480		-.1770	-.4990	-.3050	-.2580	-.3720
90.000	.9480	.4550	-.2480	-.3780	-.0500	-.0070			-.0520		-.2380	-.6270	-.3170	-.2640	-.2780
105.000	.9480														
110.000	.9480														
120.000	.9480		-.4730	-.4110	-.0520	.0450			.0280		-.5470	-.4620	-.2600	-.2190	-.2110
135.000	.9480									-.6270					
142.000	.9480										-.7710	-.2570	-.1510	-.1380	-.1760
150.000	.9480		-.5450	-.4370	-.0410	.2440			-.3660						
157.000	.9480							.1130							
162.000	.9480								-.5930						
165.000	.9480										-.5170	-.2180	-.1350	-.0790	-.1140
169.000	.9480								-.7000						
172.000	.9480						.4330								
180.000	.9480	-.0700	-.6700	-.2280	-.0390	.3860			-.2200		-.5570	-.1650	-.1110	-.0820	-.0820

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2200							-.0450		-.1240
40.000	.2340	.2370		.1160	.0350	-.0650	-.0670			-.1280
70.000		-.6220	-.5220	-.2440	-.2870	-.3220	-.2220	-.1670		
90.000		-.4670	-.3740	-.3620	-.3420	-.2910	-.2300	-.1800		
105.000				-.2760	-.2840	-.2890	-.2440	-.2080		
110.000									-.2600	
120.000		-.2390	-.0470	.0070	-.3980	-.3170	-.2070	-.1720	-.2090	
135.000				.2120	-.2010	-.3130	-.2090	-.2030		
150.000		-.2200	-.0880	.1620	-.2330	-.3140	-.2620	-.2530		
165.000		-.1340		.0400	.0880	-.2490	-.2340	-.2160		
180.000		-.1090	-.0310	-.0340						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB01)

MACH (1) = .599 ALPHA (6) = 20.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.8260	.9800	.0000	.1340	.3030	.2820			.2700		.2420	.2400	.2620	.2750	.3060
20.000	.8260		.5360	.1670	.2940	.2780			.2660		.2250				
40.000	.8260		.4320	.1080	.1890	.1650			.1060		-.1050	-.1530	-.0090	.1260	.2560
55.000	.8260		.2980	-.1170	-.0610	-.2030			-.1730		-.2100				
70.000	.8260		-.0260	-.3140	-.2540	-.0700			-.0950		-.2290	-.5780	-.4200	-.3750	-.7090
90.000	.8260	.3600	-.3430	-.4690	-.1330	-.0720			-.1040		-.3010	-.7630	-.4660	-.3960	-.3750
105.000	.8260														
110.000	.8260														
120.000	.8260		-.6510	-.5470	-.1300	-.0100			.0470		-.7060	-.5620	-.3610	-.3030	-.2720
135.000	.8260														
142.000	.8260									-.6800					
150.000	.8260		-.7420	-.4910	-.1000	.2120			-.4300		-.8590	-.2820	-.2040	-.2390	-.3230
157.000	.8260							.0730							
162.000	.8260								-.6720						
165.000	.8260										-.5210	-.2280	-.1650	-.0800	-.1350
169.000	.8260								-.8020						
172.000	.8260						.3730								
180.000	.8260	-.2720	-.8810	-.3170	-.0880	.3410			-.3120		-.5410	-.1580	-.1080	-.0825	-.0920

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3170							-.0140		-.1160
40.000	.3150	.3340		.2130	.1240	.0040	-.0190			-.1410
70.000		-.9050	-.7350	-.6000	-.4090	-.3210	-.2200	-.2020		
90.000		-.8050	-.7350	-.7710	-.5760	-.3760	-.2580	-.2220		
105.000				-.5420	-.4940	-.3720	-.3030	-.2650		
110.000									-.3340	
120.000		-.3160	-.1430	-.1990	-.5850	-.4020	-.2670	-.2230	-.2540	
135.000				.2200	-.2430	-.3540	-.2310	-.2250		
150.000		-.2920	-.1200	.1610	-.3030	-.3760	-.3280	-.3230		
165.000		-.1890		.0110	.0500	-.2940	-.2770	-.2730		
180.000		-.1450	-.0690	-.0770						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPB01)

AMES 11-707 OA12 O2A ORBITER FUSELAGE

MACH (1) = .597 ALPHA (7) = 22.580

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0189	.0339	.0692	.1355	.1598	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.7520	1.0200	.0000	.2420	.3650	.3360			.3230		.2770	.2950	.3080	.3260	.3580
25.000	.7520		.6230	.2660	.3470	.3240			.3170		-.1480	-.2130	-.0300	.1460	.2910
40.000	.7520		.4980	.1690	.2130	.1590			.0880		-.2610				
55.000	.7520		.3320	-.1090	-.1110	-.2930			-.2540		-.2510	-.6160	-.4810	-.4390	-.9330
70.000	.7520		-.0460	-.3470	-.3250	-.1120			-.1260		-.7810	.3410	.5430	-.4510	-.4230
90.000	.7520	.2880	-.3940	.5280	-.1990	-.1230			.1350						
105.000	.7520														
110.000	.7520								.0440		-.7920	-.6180	-.4090	-.3420	-.2810
120.000	.7520		-.7550	-.6260	-.1930	-.0480									
135.000	.7520									-.7110					
142.000	.7520								-.4650		-.9090	-.3020	-.2530	-.3310	-.4160
150.000	.7520		-.8500	-.4750	-.1280	.1950		.0600							
157.000	.7520								-.7090						
162.000	.7520										-.5290	-.2340	-.2080	-.0780	-.1580
165.000	.7520								-.8550						
169.000	.7520						.3490								
172.000	.7520								-.3590		-.5230	-.1510	-.1070	-.0810	-.1120
190.000	.7520	-.3970	-.9660	-.3530	-.1050	.3170									

X/LB	.5973	.6626	.7380	.7659	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3630							.0010		-.1220
40.000	.3540	.3810		.2580	.1720	.0330	-.0030			-.1510
70.000		-1.0530	-.7830	-.5160	-.3490	-.3330	-.2840	-.2420		
90.000		-1.0680	-.9940	-.9560	-.6160	-.4500	-.2850	-.2520		
105.000				-.7110	-.5460	-.4140	-.3390	-.2990		
110.000									-.4010	
120.000		- 3590	-.1850	-.3020	-.6660	-.4320	-.2900	-.2490	-.2810	
135.000				.2780	-.2430	-.3420	-.2340	-.2380		
150.000		-.2820	-.1140	.1310	-.2670	-.3910	-.3220	-.3320		
165.000		-.2300		.0100	.0310	-.3080	-.3030	-.3070		
[illegible]				-.0940						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBPB01)

MACH (2) = .905 ALPHA (1) = -4.560

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1800	.4440	.0000	-.6120	-.5350	-.0320			-.0910		-.1560	-.1280	-.0560	-.0160	-.0030
25.000	1.1800		-.3470	-.7040	-.4860	-.0670			-.1120		-.1810				
40.000	1.1800		-.1830	-.8020	-.2310	-.1930			-.2440		-.3040	-.3280	-.0760	-.0370	-.0070
55.000	1.1800		-.0970	-.7830	-.0990	-.0710			-.1400		-.1690				
70.000	1.1800		-.0390	-.6630	-.0570	-.0080			-.1230		-.1970	-.7070	-.0140	.0590	.1720
90.000	1.1800	.6880	.0110	-.4760	-.0240	-.0080			-.1540		-.2420	-.7870	-.0260	.0420	.0590
105.000	1.1800														
110.000	1.1800														
120.000	1.1800		.1550	-.1130	.1040	.1270			-.1750		-.3170	-.6750	-.0110	.0240	.0540
135.000	1.1800									-1.0490					
142.000	1.1800								.1790		-.6700	-.3550	-.0440	.0240	.0530
150.000	1.1800		.2670	.1220	.2750	.4810		.4220							
157.000	1.1800								.0690						
162.000	1.1800										-.8180	-.3630	.1680	.0340	.0450
165.000	1.1800								.0940						
169.000	1.1800						.8070								
172.000	1.1800								.4140		-1.0730	-.2170	-.0150	.0110	.0530
180.000	1.1800	.8530	.2400	.2180	.3340	.7230									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0170							-.0900		-.1290
40.000	-.0070	-.1570		-.3020	-.3020	-.4200	-.2420			-.1520
70.000		.0360	-.0380	-.1140	-.1030	-.2250	-.0520	-.0580		
90.000		.0580	.0380	-.0530	-.1680	-.2960	-.0970	-.0660		
105.000				-.0240	-.2710	-.3560	-.1110	-.0960		
110.000									-.2350	
120.000		.0710	.1860	.0710	-.4640	-.3930	-.1360	-.1140	-.1980	
135.000				.5110	.0460	-.4210	-.1980	-.1750		
150.000		.0850	.2230	.3890	.1380	-.2440	-.1640	-.2190		
165.000		.0820		.3320	.2450	-.1520	-.1510	-.2260		
180.000		.0810	.1780	.2400						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBFB01)

MACH (2) = .951 ALPHA (2) = -.010

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE C

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2150	.5920	.0000	-.6070	-.3340	-.0110			-.0520		-.1090	-.1240	-.0500	-.0020	.0290
25.000	1.2150		-.1730	-.6910	-.2320	-.0220			-.0570		-.1320				
40.000	1.2150		-.0590	-.7620	-.0920	-.0610			-.1130		-.2080	-.2500	-.0440	-.0010	.0370
55.000	1.2150		-.0080	-.6930	-.0080	.0270			-.0450		-.1470				
70.000	1.2150		.0020	-.5860	.0060	.0530			-.0470		-.1970	-.6950	-.0470	.0220	.0110
90.000	1.2150	.7030	-.0100	-.4860	.0360	.0650			-.0620		-.2330	-.8020	-.0720	.0220	.0140
105.000	1.2150														
110.000	1.2150														
125.000	1.2150		.0360	-.1980	.1100	.1760			-.0750		-.3800	-.8140	-.0660	.0170	.0240
135.000	1.2150														
142.000	1.2150														
150.000	1.2150		.0810	-.0190	.2040	.4700				-1.0630					
157.000	1.2150								.1390		-.7620	-.4520	-.0290	.0110	.0180
162.000	1.2150							.4080							
165.000	1.2150								.0420						
169.000	1.2150										-.8670	-.4290	-.0010	.0240	.0140
172.000	1.2150								-.0130						
180.000	1.2150	.7090	.0190	.0700	.2400	.6810	.7700		.3190		-1.1760	-.2930	-.0150	.0440	.0140

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0280							-.0960		-.1300
40.000	.0490	.0330		-.1440	-.2290	-.3670	-.2890			-.1430
70.000		-.0940	-.1550	-.1910	-.1430	-.3110	-.0500	-.0410		
90.000		-.0510	-.0550	-.1090	-.2180	-.4100	-.0800	-.0550		
105.000				-.0620	-.2940	-.4340	-.0960	-.0850		
110.000									-.2130	
125.000		-.0150	.1130	.0710	-.4560	-.4870	-.0950	-.0880	-.1680	
135.000				.4390	-.0140	-.5000	-.1560	-.1480		
150.000		.0130	.1490	.2990	.0440	-.3570	-.1940	-.2110		
165.000		.0170		.2530	.1600	-.2440	-.1970	-.2080		
180.000		.0170	.1170	.1630						

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBPB01)

MACH (2) = .904 ALPHA (3) = 4.980

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2200	.7580	.0000	-.5940	.0280	.0490			.0190		-.0510	-.0730	-.0380	.0360	.0810
20.000	1.2200		.0220	-.6160	.0270	.0460			.0200		-.0660				
40.000	1.2200		.0820	-.6080	.0360	.0550			.0140		-.1120	-.1670	-.0710	.0410	.0940
55.000	1.2200		.0900	-.5840	.0560	.0810			.0230		-.1100				
70.000	1.2200		.0520	-.4970	.0310	.0930			.0240		-.1790	-.6670	-.1470	-.0180	-.0540
90.000	1.2200	.7030	-.0320	-.4730	.0750	.1130			.0210		-.2250	-.7940	-.2030	-.0110	-.0350
105.000	1.2200														
110.000	1.2200														
120.000	1.2200		-.0970	-.3880	.1090	.2090			.0320		-.4580	-.9050	-.1420	.0010	-.0160
135.000	1.2200														
142.000	1.2200									-.9970					
150.000	1.2200		-.1130	-.2920	.1520	.4570			.1040		-.8420	-.6010	-.0660	.0130	-.0420
157.000	1.2200							.4000							
162.000	1.2200								-.0540						
165.000	1.2200										-.9410	-.5090	-.0510	.0300	-.0070
169.000	1.2200								-.1120						
172.000	1.2200						.7340								
180.000	1.2200	.5360	-.2210	-.1750	.1630	.6390			.2240		-.9030	-.5330	-.0580	.0130	-.0460

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0970							-.1190		-.1280
40.000	.1250	.0940		-.0330	-.1280	-.2850	-.3560			-.1440
70.000		-.2840	-.3280	-.2590	-.1790	-.4070	-.0330	-.0260		
90.000		-.2220	-.1870	-.1520	-.2830	-.4780	-.0530	-.0410		
105.000				-.1000	-.3250	-.4890	-.0720	-.0710		
110.000									-.1970	
120.000		-.1380	.0280	.0810	-.4300	-.5580	-.0560	-.0630	-.1580	
135.000				.3340	-.0770	-.5690	-.1160	-.1250		
150.000		-.0770	.0670	.2160	-.0490	-.4580	-.1960	-.1900		
165.000		-.0710		.1690	.0830	-.3590	-.2500	-.1800		
180.000		-.0660	.0370	.0850						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBPB01)

MACH (2) = .906 ALPHA (4) = 9.990

SECTION (1:ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1850	.9080	.0000	-.4330	.1090	.1300			.1010		.0330	.0120	.0320	.0940	.1570
20.000	1.1850		.2120	-.4240	.1020	.1290			.1060		.0330				
40.000	1.1850		.2380	-.3480	.1030	.1430			.1110		-.0310	-.0920	-.0600	.0770	.1620
55.000	1.1850		.1880	-.3770	.0630	.0840			.0510		-.0690				
70.000	1.1850		.0910	-.4400	-.0040	.1080			.0590		-.1310	-.6560	-.4780	-.1950	-.1170
90.000	1.1850	.6780	-.0640	-.4940	.0730	.1340			.0720		-.2100	-.8050	-.2800	-.0830	-.0950
105.000	1.1850														
110.000	1.1850														
120.000	1.1850		-.2240	-.4930	.0980	.2190			.1220		-.0460	-.9310	-.3310	-.0270	-.0500
135.000	1.1850									-.8330					
142.000	1.1850										-.0870	-.7490	-.1870	.0220	-.0170
150.000	1.1850		-.2890	-.5030	.1150	.4390			.0700						
157.000	1.1850							.0390							
162.000	1.1850								-.0980						
165.000	1.1850														
169.000	1.1850								-.1920						
172.000	1.1850						.6780								
180.000	1.1850	.3390	-.4200	-.5400	.1150	.5890			.1370		-.1100	-.1290	.0190	.0110	-.0140

X/LB	.5370	.6020	.7380	.7860	.8280	.8840	.9280	.9810	1.0010	1.0390
PHI										
.000	.1820							-.3030	-.1440	
40.000	.2070	.2070		.1720	-.0270	-.2090	-.2760		-.1650	
70.000		-.4020	-.6440	-.2710	-.1180	-.3870	-.3700	-.1030		
90.000		-.3080	-.4740	-.2450	-.2040	-.3640	-.4500	-.0820		
105.000				-.2130	-.2130	-.3850	-.4730	-.1070		
110.000									-.2240	
120.000		-.2020	-.0840	.1680	-.3530	-.4720	-.4010	-.1830	-.1760	
135.000				.2740	-.1010	-.4780	-.3160	-.1520		
150.000		-.1690	-.0300	.1690	-.0960	-.4280	-.3070	-.2360		
165.000		-.1460		.1080	.0480	-.3660	-.2840	-.1960		
180.000		-.1330	-.0430	.0250						

AMES 11-7U7 OA12 OEA ORBITER FUSELAGE (RBFB01)

MACH (2) = .901 ALPHA (5) = 14.990

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1300	1.0240	.0000	-.1280	.2120	.2190			.1950		.1560	.1200	.1410	.1690	.2510
25.000	1.1300		.4220	-.0940	.2110	.2220			.2040		.1470				
40.000	1.1300		.3930	-.0770	.1760	.2070			.1640		.0120	-.0510	.0000	.0970	.2350
55.000	1.1300		.2840	-.2110	.0300	.0270			.0230		-.0490				
75.000	1.1300		.1160	-.3490	-.0930	.0910			.0650		-.0940	-.6450	-.5260	-.2610	-.2880
90.000	1.1300	.6270	-.1070	-.5560	.0170	.1150			.0080		-.2060	-.8150	-.5310	-.1920	-.1660
105.000	1.1300														
115.000	1.1300														
120.000	1.1300		-.3640	-.5990	.1540	.2030			.1970		-.5570	-.8590	-.4280	-.1930	-.1840
135.000	1.1300														
142.000	1.1300									-.7770					
150.000	1.1300		-.4720	-.6150	.0870	.4030			.0180		-.9430	-.5000	-.3860	-.0420	-.1140
157.000	1.1300							.3530							
162.000	1.1300								-.1470						
165.000	1.1300										-.9520	-.4710	-.3460	.0310	-.0470
169.000	1.1300								-.2540						
172.000	1.1300						.5840								
180.000	1.1300	.1670	-.6400	-.6290	.0840	.5130			.0560		-.8150	-.5650	-.1610	.1160	-.0230

X/LB	.5873	.6626	.7380	.7869	.8283	.8648	.9282	.9639	1.0015	1.0392
PHI										
.000	.2710							-.2120		-.1690
40.000	.2840	.3030		.1730	.0740	-.1280	-.1880			-.1940
75.000		-.5780	-.7860	-.4290	-.4380	-.6284	-.7690	-.2730		
90.000		-.4380	-.5790	-.3750	-.5390	-.5860	-.6460	-.5610		
105.000				-.2200	-.4030	-.5780	-.6040	-.6060		
115.000									-.2460	
120.000		-.2800	-.0700	.1950	-.3350	-.6410	-.5630	-.5160	-.1490	
135.000				.2290	-.1470	-.6160	-.4750	-.4050		
150.000		-.2290	-.0590	.1420	-.1430	-.5480	-.4740	-.4150		
165.000		-.1950		.0630	.0280	-.4550	-.4020	-.2460		
180.000		-.1610	-.0590	-.0180						

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBPB01)

MACH (2) = .900 ALPHA (6) = 20.020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0420	1.1100	.0000	.1350	.3430	.3310			.3160		.2770	.2560	.2650	.2960	.3510
20.000	1.0420		.6100	.1690	.3390	.3260			.3190		.2620				
40.000	1.0420		.5320	.1190	.2420	.2430			.1960		.0070	-.0280	.0500	.1610	.3080
55.000	1.0420		.3610	-.0930	-.0160	-.0900			-.0430		-.0640				
70.000	1.0420		.1400	-.2960	-.2140	.0450			.0550		-.0710	-.6220	-.5240	-.2740	-.6970
90.000	1.0420	.5570	-.1490	-.5860	-.0680	.0640			.0810		-.1730	-.8210	-.7450	-.2240	-.2810
105.000	1.0420														
110.000	1.0420														
125.000	1.0420		-.4960	-.6780	-.0370	.1620			.2470		-.6540	-.9870	-.4550	-.1580	-.1190
135.000	1.0420														
142.000	1.0420									-.7420					
150.000	1.0420		-.6370	-.6320	-.0390	.3600			-.0200		-1.0260	-.6180	-.4000	-.1340	-.2190
157.000	1.0420							.3240							
162.000	1.0420								-.1630						
165.000	1.0420										-.8530	-.4680	-.4040	.0390	-.0770
169.000	1.0420								-.2840						
172.000	1.0420						.4430								
180.000	1.0420	.0210	-.6380	-.5160	-.0810	.3950			.0010		-.7760	-.5300	-.1550	.0150	-.0360

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3750							-.1040		-.1720
40.000	.3750	.4060		.2810	.1810	-.0050	-.0820			-.2580
70.000		-.7530	-.9470	-.6000	-.5710	-.5280	-.4830	-.4900		
90.000		-.6690	-.9070	-.8180	-.9320	-.6560	-.5090	-.4210		
105.000				-.4000	-.6060	-.7620	-.4510	-.4540		
110.000									-.4390	
120.000		-.2980	-.1930	.0270	-.3830	-.8000	-.4980	-.3220	-.3630	
135.000				.2290	-.1940	-.6660	-.5780	-.2190		
150.000		-.2840	-.1200	.1390	-.1700	-.6290	-.5740	-.3750		
165.000		-.2770		.0270	.0150	-.5400	-.4940	-.2830		
180.000		-.2270	-.1230	-.0700						

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBPB01)

MACH (2) = .902 ALPHA (7) = 25.040

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9270	1.1870	.0000	.3810	.4840	.4560			.4440		.4080	.3980	.4020	.4220	.4610
20.000	.9270		.7920	.4090	.4630	.4470			.4350		.3920				
40.000	.9270		.6550	.3030	.3110	.2570			.1940		-.0290	-.0400	.1080	.2500	.3880
55.000	.9270		.4280	.0110	-.0650	-.2800			-.1670		-.1100				
70.000	.9270		.1520	-.2560	-.4680	-.0290			.0110		-.0630	-.5560	-.5180	-.5600	-1.1100
90.000	.9270	.4660	-.1920	-.5980	-.1690	-.0280			.0360		-.1590	-.7860	-.7890	-.3710	-.3150
105.000	.9270														
110.000	.9270														
120.000	.9270		-.6170	-.7070	-.1570	.0950			.2530		-.7350	-1.1220	-.5820	-.3190	-.1910
135.000	.9270														
142.000	.9270									-.6850					
150.000	.9270		-.7370	-.4630	-.2230	.2900			-.0490		-1.0970	-.7610	-.4240	-.2390	-.2590
157.000	.9270							.3010							
162.000	.9270								-.1620						
165.000	.9270										-.8060	-.5120	-.4260	.0950	-.0600
169.000	.9270								-.3010						
172.000	.9270						.3640								
180.000	.9270	-.2060	-.5220	-.4490	-.3150	.3000			-.0430		-.7710	-.5090	-.1140	.0440	-.0310

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
.000	.4820							-.0060		-.1450
40.000	.4620	.3050		.3880	.2530	.1110	.0290			-.2850
70.000		-.6580	-.6180	-.6060	-.4700	-.4710	-.4790	-.4870		
90.000		-.9100	-.8060	-.8540	-.5310	-.4620	-.4690	-.4800		
105.000				-.7940	-.7930	-.4760	-.5260	-.5210		
110.000									-.5820	
120.000		-.2760	-.2930	-.3880	-.8550	-.5310	-.5310	-.5380	-.5410	
135.000				.2230	-.1520	-.3660	-.3520	-.4080		
150.000		-.2290	-.1200	.1590	-.1410	-.4100	-.3380	-.4600		
165.000		-.2160		.0510	.0500	-.3920	-.3130	-.4960		
180.000		-.1800	-.1220	-.0840						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB02) (01 MAY 73)

REFERENCE DATA

SREF = 2.421U SQ.FT. XMRP = 28.53UU INCHES
LREF = 39.849U INCHES YMRP = .UUUU INCHES
BREF = 39.849U INCHES ZMRP = .UUUU INCHES
SCALE = .03UU SCALE

PARAMETRIC DATA

ALPHA = .UUU RUDDER = .UUU
ELEVON = .UUU RUDFLR = .UUU

MACH (1) = .9UU BETA (1) = -10.U1U

SECTION 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.UUUU	.UU75	.U188	.U339	.U6U2	.1355	.15U6	.1581	.1732	.1958	.2259	.2711	.32UU	.3953	.512U
PHI															
.UUU	.9720	.377U	.UUUU	-.742U	-.15UU	-.U77U			-.U81U		-.U89U	-.U76U	-.U53U	-.U45U	-.U35U
25.UUU	.9720		-.342U	-.662U	-.231U	-.116U			-.119U		-.121U				
4U.UUU	.9720		-.U19U	-.415U	-.192U	-.291U			-.3U4U		-.335U	-.247U	-.174U	-.1U5U	-.U57U
55.UUU	.9720		.115U	-.165U	.U54U	.U72U			.U62U		.U44U				
7U.UUU	.9720		.287U	-.UU2U	.149U	.161U			.113U		.UUUU	-.253U	.UUUU	.U65U	.U43U
9U.UUU	.9720	.867U	.328U	.U51U	.2U5U	.19U			.126U		-.U11U	-.292U	-.U11U	.U41U	.U25U
1U5.UUU	.9720														
11U.UUU	.9720														
12U.UUU	.9720		.328U	.154U	.273U	.289U			.197U		-.139U	-.228U	-.U58U	-.U17U	-.UU8U
135.UUU	.9720									-.2415					
142.UUU	.9720														
15U.UUU	.9720		.214U	.125U	.241U	.457U			.U76U		-.525U	.167U	-.U86U	-.U5UU	-.U32U
157.UUU	.9720							.436U							
162.UUU	.9720								-.U48U						
165.UUU	.9720										-.345U	-.132U	-.152U	-.U27U	-.UU9U
169.UUU	.9720								-.219U						
172.UUU	.9720						.572U								
18U.UUU	.9720	.587U	-.U55U	.U14U	.1U6U	.427U			.U5UU		-.612U	-.254U	-.274U	-.348U	-.256U

X/LB	.5873	.6626	.738U	.7869	.8283	.8848	.9262	.9639	1.UU15	1.U392
PHI										
.UUU	-.U49U							-.113U		-.163U
4U.UUU	.U74U	-.144U		-.188U	-.222U	-.213U	-.145U			-.162U
7U.UUU		-.U5UU	-.U45U	.U2UU	.134U	.U64U	.U51U	-.U11U		
9U.UUU		-.U17U	.U36U	.1U2U	.126U	.U21U	.UU7U	-.U4UU		
				.193U	.U86U	.U47U	-.U18U	-.U65U		
11U.UUU									-.164U	
12U.UUU		-.U24U	.14UU	.392U	.UU1U	-.U43U	-.U05U	-.U25U	-.1UUU	
135.UUU				.237U	-.U1UU	-.111U	-.U44U	-.U95U		
15U.UUU		-.U14U	.UU7U	.U82U	-.131U	-.U27U	-.UU4U	-.1U7U		
165.UUU		.U18U		.157U	.135U	.U77U	.U22U	-.191U		
18U.UUU		-.199U	-.113U	-.U78U						

AMES 11-7U7 OA12 OBA ORBITER FUSELAGE (RBFBU2)

MACH (1) = .398 BETA (2) = -4.96U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0300	.4110	.0000	-.7020	-.1110	-.0420			-.0530		-.0630	-.0520	-.0300	-.0230	-.0100
20.000	1.0300		-.3460	-.6220	-.1550	-.0650			-.0690		-.0840				
40.000	1.0300		-.1080	-.4320	-.1280	-.1430			-.1590		-.1920	-.1460	-.0770	-.0370	-.0090
55.000	1.0300		.0210	-.2720	.0080	.0380			.0170		-.0480				
75.000	1.0300		.0840	-.1770	.0420	.0790			.0310		-.0790	-.0300	-.0530	.0190	-.0240
90.000	1.0300	.7370	.1070	-.1290	.1080	.0900			.0270		-.1010	-.0770	-.0600	-.0010	-.0070
105.000	1.0300														
110.000	1.0300														
120.000	1.0300		.1480	.0090	.1810	.1850			.0370		-.2040	-.2550	-.0750	-.0310	-.0140
135.000	1.0300														
142.000	1.0300									-.3520					
150.000	1.0300		.1280	.0690	.2130	.4110			-.0350		-.4990	-.1710	-.0860	-.0400	-.0160
157.000	1.0300							.3490							
162.000	1.0300								-.1500						
165.000	1.0300										-.4010	-.1520	-.1150	-.0330	-.0220
169.000	1.0300								-.2430						
172.000	1.0300						.6150								
180.000	1.0300	.8040	-.0290	.0510	.1620	.5120			.1110		-.5430	-.1790	-.1670	-.1000	-.0740

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0220							-.1120		-.1490
40.000	-.0230	-.0930		-.1560	-.1950	-.2060	-.1410			-.1440
75.000		-.1020	-.1070	-.0620	.0520	.0020	.0050	-.0360		
90.000		-.0610	-.0250	.0080	.0310	-.0420	-.0390	-.0650		
105.000				.0690	-.0250	-.0640	-.0640	-.0960		
110.000									-.1780	
120.000		-.0300	.1230	.2450	-.1640	-.1110	-.0490	-.0610	-.1380	
135.000				.3530	.0010	-.1300	-.0630	-.1040		
150.000		-.0040	.1200	.1650	-.0630	-.0900	-.0690	-.1350		
165.000		.0060		.1760	.1430	-.0230	-.0720	-.1660		
180.000		-.0780	.0180	.0550						

AMES 11-7U7 OA12 OBA ORBITER FUSELAGE (PSPS/2)

MACH (1) = .998 BETA (3) = 5.23

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

Y/B	.0000	.0175	.0488	.0839	.1192	.1355	.1918	.1581	.1732	.1958	.2239	.2711	.3200	.3953	.5120
PHI															
.000	1.0611	.3837	.0000	-.7139	-.1140	-.0450			-.0900		-.0640	-.0620	-.0350	-.0290	-.0140
2.000	1.0611		-.4790	-.6540	-.1150	-.0420			-.0450		-.0790				
4.000	1.0611		-.4080	-.5550	-.1190	-.0520			-.0610		-.1270	-.1010	-.0470	-.0220	.0000
55.000	1.0611		-.3790	-.5350	-.0990	-.0540			-.0810		-.1330				
7.000	1.0611		-.3570	-.5030	-.1220	-.0430			-.1080		-.1870	-.4020	-.1050	-.0260	-.0330
9.000	1.0611	.3850	-.3720	-.4710	-.1120	-.0350			-.1500		-.2220	-.4220	-.0940	-.0320	-.0260
105.000	1.0611														
11.000	1.0611														
12.000	1.0611		-.2370	-.2490	-.1070	-.0450			-.3130		-.2870	-.2570	-.0990	-.0410	-.0220
135.000	1.0611									-.6280					
142.000	1.0611														
15.000	1.0611		-.0790	-.0420	.0390	.1680			-.2980		-.4370	-.1920	-.0990	-.0510	-.0190
157.000	1.0611							.0020							
162.000	1.0611								-.4810						
165.000	1.0611										-.4360	-.1580	-.1030	-.0680	-.0590
169.000	1.0611								-.3540						
172.000	1.0611						.5240								
180.000	1.0611	.5390	-.0170	.1490	.1690	.9450			.1140		-.5410	-.1680	-.1490	-.0620	-.0390
Y/B	.5877	.6428	.7380	.7869	.8283	.8848	.9252	.9539	1.0015	1.0392					
PHI															
.000	-.1250							-.1140		-.1530					
6.000	.0070	.0530		-.1150	-.1560	-.1580	-.1450			-.1550					
7.000		-.1470	-.1360	-.1970	-.1970	-.1130	-.0790	-.0990							
9.000		-.0980	-.1130	-.1710	-.1490	-.1530	-.1240	-.1250							
105.000				-.1820	-.2310	-.1880	-.1510	-.1510							
11.000									-.2180						
12.000		-.0530	.0380	-.1870	-.5830	-.2790	-.1630	-.1490	-.1990						
135.000				.3920	-.1770	-.3710	-.2380	-.2480							
15.000		-.0140	.0920	.2090	.0310	-.2990	-.2430	-.2190							
165.000		-.0420		.1940	.1250	-.3220	-.2620	-.1770							
180.000		-.0590	.0290	.1630											

DATE 17 SEP 75 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPBU2)

MACH (1) = .599 BETA (4) = 10.370

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI									-.0730		-.0910	-.0760	-.0590	-.0480	-.0360
.000	.9880	.3450	.0000	-.7390	-.1480	-.0750			-.0620		-.0950				
20.000	.9880		-.5620	-.6950	-.1360	-.0610			-.0850		-.1760	-.1470	-.0960	-.0500	-.0170
40.000	.9880		-.5710	-.6430	-.1470	-.0690			-.1170		-.1640				
55.000	.9880		-.5910	-.6860	-.1480	-.0940			-.1480		-.2150	-.4030	-.1130	-.0320	-.0310
70.000	.9880		-.6110	-.6900	-.1790	-.1100			-.2170		-.2560	-.4120	-.1030	-.0340	-.0330
90.000	.9880	.1300	-.6220	-.6460	-.1820	-.1580									
105.000	.9880														
110.000	.9880								-.5020		-.3120	-.3030	-.1130	-.0510	-.0330
120.000	.9880		-.4500	-.4600	-.1910	-.2120									
125.000	.9880									-.9380					
135.000	.9880								-.4550		-.4440	-.2280	-.1280	-.0660	-.0550
142.000	.9880														
150.000	.9880		-.2215	-.2160	-.0720	.0130		-.2480							
157.000	.9880								-.7130						
162.000	.9880										-.5290	-.2010	-.1250	-.1690	-.1550
165.000	.9880								-.4530						
169.000	.9880						.3860								
172.000	.9880								.0210		-.6110	-.2480	-.2210	-.2780	-.2290
180.000	.9880	.5370	-.0530	-.0070	.1010	.4090									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI								-.1170		-.1610
.000	-.0440									-.1640
40.000	-.0480	-.0510		-.1030	-.1360	-.1760	-.1460			
70.000		-.1660	-.2390	-.2550	-.1370	-.1510	-.1140	-.1210		
90.000		-.1200	-.1610	-.2280	-.2000	-.1920	-.1600	-.1460		
105.000				-.2740	-.3200	-.2440	-.1920	-.1810		
110.000									-.2380	
120.000		-.0820	-.0170	-.3310	-.7610	-.3570	-.2310	-.2010	-.2370	
135.000				.3920	-.2630	-.5420	-.3650	-.2930		
150.000		-.1280	-.0410	.0950	-.0740	-.4050	-.3260	-.2540		
165.000		-.1680		.0820	-.0040	-.5550	-.4500	-.1980		
180.000		-.2170	-.1290	-.0630						

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBPBU2)

MACH (2) = .904 BETA (1) = -10.150

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0642	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1540	.5470	.0000	-.7980	-.1960	-.0510			-.0930		-.1550	-.1550	-.0850	-.0320	-.0040
20.000	1.1540		-.0990	-.7970	-.2060	-.1000			-.1260		-.1930				
40.000	1.1540		.1630	-.4970	-.2560	-.3000			-.3490		-.4240	-.4790	-.1900	-.1020	-.0270
55.000	1.1540		.3170	-.1870	.0620	.1060			.0810		-.0150				
70.000	1.1540		.3920	-.0420	.1710	.2090			.1440		.0020	-.5920	.0190	.0870	.0060
90.000	1.1540	.9910	.4140	.0430	.2550	.2540			.1700		-.0060	-.7110	.0150	.0650	.0570
105.000	1.1540														
110.000	1.1540														
120.000	1.1540		.3950	.1570	.3260	.3830			.2680		-.1070	-.7740	-.0140	.0120	.0230
135.000	1.1540														
142.000	1.1540									-.2100					
150.000	1.1540		.2880	.1430	.2950	.5820			.2890		-.5280	-.5880	-.0380	-.0180	.0050
157.000	1.1540							.6020							
162.000	1.1540								.1770						
165.000	1.1540										-.5270	-.4770	-.1360	.0080	.0290
169.000	1.1540								-.0220						
172.000	1.1540						.7440								
180.000	1.1540	.6760	.0070	.0340	.1580	.5850			.2690		-1.0760	-.6110	-.3260	-.2770	-.1820

X/LB	.5873	.6626	.7387	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0110							-.1320		-.1620
40.000	-.0230	-.1290		-.2010	-.2970	-.4250	-.1610			-.1660
70.000		-.0310	-.0900	-.0040	.1180	.0610	.0910	.0410		
90.000		-.0040	.0070	.1040	.0850	.0180	.0560	.0300		
105.000				.2050	.0460	-.0050	.0300	.0040		
110.000									-.1930	
120.000		-.0210	.1470	.4350	-.0530	-.0470	.0480	.0280	-.1210	
135.000				.3290	.0390	-.0690	.0310	-.1270		
150.000		-.0060	.1490	.1560	-.0970	.0270	.0680	-.0760		
165.000		.0280		.2190	.1630	.1170	.0910	-.2230		
180.000		-.1330	-.0110	.0430						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB02)

MACH (2) = .901 BETA (2) = -5.040

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2000	.5910	.0000	-.6440	-.3090	-.0160			-.0580		-.1270	-.1300	-.0610	-.0070	.0210
20.000	1.2000		-.1170	-.6920	-.2030	-.0470			-.0770		-.1500				
40.000	1.2000		.0670	-.6530	-.1480	-.1420			-.1860		-.2800	-.3390	-.0850	-.0290	.0170
55.000	1.2000		.1630	-.4060	.0220	.0700			.0210		-.0690				
75.000	1.2000		.2010	-.2760	.0720	.1260			.0470		-.0840	-.6560	-.0170	.0460	.0320
90.000	1.2000	.8590	.2000	-.1880	.1370	.1590			.0500		-.1040	-.7730	-.0250	.0340	.0270
105.000	1.2000														
110.000	1.2000														
125.000	1.2000		.2140	-.0090	.2220	.2880			.1010		-.1840	-.8330	.0010	.0130	.0210
135.000	1.2000														
142.000	1.2000									-.6710					
150.000	1.2000		.1750	.0670	.2630	.5420			.2210		-.5720	-.5880	-.0230	.0010	.0170
157.000	1.2000							.5270							
162.000	1.2000								.1050						
165.000	1.2000										-.7300	-.4770	-.0390	.0130	.0160
169.000	1.2000								-.0110						
172.000	1.2000						.7810								
180.000	1.2000	.6850	.0060	.0480	.2170	.6570			.3040		-1.1880	-.3750	-.1810	-.0310	-.0290

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0250							-.1000		-.1400
40.000	.0310	-.0660		-.1620	-.2570	-.3690	-.2210			-.1430
70.000		-.0780	-.1500	-.1150	-.0110	-.0470	.0310	.0040		
90.000		-.0420	-.0440	-.0130	-.0680	-.0930	-.0100	-.0130		
105.000				.0700	-.1350	-.1150	-.0340	-.0430		
110.000									-.2020	
120.000		-.0250	.1240	.2680	-.2930	-.1610	-.0270	-.0260	-.1480	
135.000				.3990	.0180	-.1570	-.0390	-.0710		
150.000		.0050	.1510	.2260	-.0310	-.0970	-.0410	-.1360		
165.000		.0150		.2310	.1590	-.0240	-.0430	-.2110		
180.000		-.0510	.0700	.1360						

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBP802)

MACH (2) = .903 BETA (3) = 5.290

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2020	.5820	.0000	-.6530	-.3550	-.0190			-.0580		-.1370	-.1390	-.0610	-.0120	.0190
20.000	1.2020		-.2290	-.6960	-.3100	-.0180			-.0550		-.1520				
40.000	1.2020		-.1710	-.7800	-.0830	-.0730			-.0760		-.2310	-.2260	-.0540	-.0050	.0340
55.000	1.2020		-.1650	-.8130	.0030	-.0110			-.0860		-.2670				
75.000	1.2020		-.1800	-.7650	.0180	-.0420			-.1080		-.3740	-.7310	-.0750	.0140	.0030
90.000	1.2020	.5400	-.1960	-.7330	-.0240	-.0120			-.1480		-.4420	-.8090	-.0800	.0160	.0150
105.000	1.2020														
110.000	1.2020														
120.000	1.2020		-.1310	-.4590	-.0060	.0510			-.2350		-.5980	-.6810	-.0660	.0100	.0170
135.000	1.2020														
142.000	1.2020									-1.1810					
150.000	1.2020		-.0190	-.1480	.1110	.3510			.0310		-.7540	-.4850	-.0890	.0260	.0160
157.000	1.2020							.2330							
162.000	1.2020								-.1350						
165.000	1.2020										-.8630	-.5010	-.0780	.0030	-.0240
169.000	1.2020								-.0460						
172.000	1.2020						.6970								
180.000	1.2020	.7030	.0160	.0420	.2170	.6490			.2960		-1.1440	-.4720	-.0980	-.0330	-.0220

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0180							-.1000		-.1370
40.000	.0480	-.0180		-.1340	-.2150	-.3270	-.3410			-.1640
75.000		-.0870	-.1530	-.2300	-.2150	-.4750	-.2730	-.1020		
90.000		-.0480	-.0680	-.1700	-.2980	-.5000	-.3870	-.1180		
105.000				-.1470	-.4080	-.5130	-.4510	-.1370		
110.000									-.2220	
120.000		-.0170	.0870	-.0900	-.5960	-.5810	-.5050	-.1430	-.1860	
135.000				.4580	-.0420	-.6920	-.5260	-.4380		
150.000		-.0010	.1160	.2700	.0760	-.4300	-.4830	-.3550		
165.000		-.0160		.2330	-.1550	-.3970	-.4200	-.2190		
180.000		-.0370	.0690	.1220						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7?7 OA12 O2A ORBITER FUSELAGE (RBFBU2)

MACH (2) = .905 BETA (4) = 10.500

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.1370	.5400	.0000	-.8230	-.2350	-.0520			-.0810		-.1620	-.1620	-.0840	-.0380	-.0140
20.000	1.1370		-.2910	-.7630	-.3450	-.0310			-.0660		-.1680				
40.000	1.1370		-.2950	-.7180	-.3330	-.0260			-.0850		-.2720	-.3160	-.0990	-.0350	.0140
55.000	1.1370		-.3330	-.6700	-.3460	-.0340			-.1170		-.3170				
70.000	1.1370		-.3750	-.6660	-.3530	-.0340			-.1510		-.4530	-.7950	-.0800	.0140	.0060
90.000	1.1370	.3600	-.3830	-.6860	-.2540	-.0770			-.2180		-.5540	-.6400	-.1020	.0240	.0150
105.000	1.1370														
110.000	1.1370														
120.000	1.1370		-.2870	-.6470	-.1830	-.0920			-.3960		-.7370	-.4910	-.1390	.0200	.0120
135.000	1.1370									-1.2710					
142.000	1.1370								-.1160		-.8300	-.5890	-.1750	-.0110	-.0070
150.000	1.1370		-.1210	-.2760	-.0320	.1890		.0320							
157.000	1.1370								-.2660						
162.000	1.1370										-.8530	-.6250	-.1860	-.1020	.1130
165.000	1.1370								-.0920						
169.000	1.1370						.5660								
172.000	1.1370								.2390		-.9710	-.6140	-.2760	-.2550	-.1710
180.000	1.1370	.6790	.0190	.0150	.1500	.5610									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0130							-.1310		-.1660
40.000	.0280	-.0220		-.1250	-.1990	-.3050	-.3380			-.1950
70.000		-.0890	-.1530	-.2420	-.2410	-.5200	-.3830	-.1400		
90.000		-.0520	-.0700	-.1880	-.3370	-.5400	-.5580	-.1510		
105.000				-.1690	-.4730	-.5610	-.5860	-.1880		
110.000									-.2260	
120.000		-.0290	.0670	-.0990	-.6650	-.6500	-.5970	-.3320	-.2180	
135.000				.4860	.0110	-.7590	-.7930	-.6040		
150.000		-.1190	-.0300	.0350	-.1290	-.5240	-.6520	-.4840		
165.000		-.1210		.1250	.0880	-.5320	-.5660	-.2650		
180.000		-.1350	-.0110	.0460						

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBPB03) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 35.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8420 INCHES ZMRP = .0000 INCHES
SCALE = .0380 SCALE

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

MACH (1) = .596 BETA (1) = -10.080

SECTION 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9890	.5540	.0000	-.5340	-.0730	-.0180			-.0280		-.0370	-.0320	-.0120	-.0040	.0180
20.000	.9890		-.0800	-.4480	-.1050	-.0360			-.0360		-.0510				
40.000	.9890		.1910	-.2080	-.0150	-.0840			-.0940		-.1200	-.0740	-.0190	.0690	.0510
55.000	.9890		.3300	-.0280	.1530	.1620			.1360		.0580				
70.000	.9890		.3540	.0410	.1830	.1880			.1380		.0140	-.2700	-.0330	.0150	-.0430
90.000	.9890	.0710	.3070	.0400	.2140	.1970			.1430		-.0220	.3540	-.0710	-.0290	-.0590
105.000	.9890														
110.000	.9890														
120.000	.9890		.1770	.0340	.2040	.2490			.2230		-.2560	-.3210	-.1450	-.1140	-.1160
135.000	.9890									-.3400					
142.000	.9890														
150.000	.9890		.0120	-.0270	.1300	.3850			-.0340		-.5850	.2270	-.1370	-.0980	-.0910
157.000	.9890							.3530							
162.000	.9890								-.1820						
165.000	.9890										-.4150	-.1790	-.1320	-.0760	-.0560
169.000	.9890								-.3840						
172.000	.9890						.5060								
180.000	.9890	.3370	-.2670	-.1190	.0160	.3760			-.0760		-.6530	-.2810	-.1370	-.4270	-.2420

X/LB	.5973	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0170							-.0980		-.1530
40.000	.0420	-.0110		-.1000	-.1520	-.1690	-.1170			-.1520
70.000		-.1700	-.1140	-.0160	.1240	.0660	.0600	.0020		
90.000		-.1340	-.0330	.0820	.1230	.0250	.0060	-.0370		
105.000				.1990	.1030	.0650	-.0160	-.0620		
110.000									-.1750	
120.000		-.1370	.0610	.4120	.0080	-.0650	-.0220	-.0370	-.1150	
135.000				.1020	-.1210	-.1950	-.1120	-.1450		
150.000		-.0830	.0310	-.0480	-.2280	-.0780	-.0340	-.1300		
165.000		-.0560		.0720	.0650	.0260	-.0020	-.1850		
180.000		-.2030	-.1260	-.1060						

AMES 11-7D7 OA12 02A ORBITER FUSELAGE (RBPB03)

MACH (1) = .599 BETA (2) = -4.990

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0460	.5970	.0000	-.4900	-.0320	.0160			-.0020		-.0120	-.0130	.0060	.0210	.0440
20.000	1.0460		-.0830	-.4130	-.0500	.0060			.0000		-.0280				
40.000	1.0460		.0970	-.2590	.0070	-.0030			-.0090		-.0580	-.0380	.0170	.0380	.0690
55.000	1.0460		.1630	-.1590	.0910	.0940			.0620		-.0180				
70.000	1.0460		.1520	-.1260	.0640	.1000			.0510		-.0700	-.3500	-.1020	-.0480	-.0900
90.000	1.0460	.7310	.0850	-.1390	.1100	.1060			.0410		-.1160	-.4280	-.1160	-.0610	-.0920
105.000	1.0460														
110.000	1.0460														
120.000	1.0460		.0050	-.0840	.1280	.1710			.0820		-.3010	-.3310	-.1440	-.0930	-.0980
135.000	1.0460														
142.000	1.0460									-.4280					
150.000	1.0460		-.0720	-.0690	.1200	.3590			-.1240		-.6300	-.2250	-.1210	-.0820	-.0710
157.000	1.0460							.2840							
162.000	1.0460								-.2810						
165.000	1.0460										-.4530	-.1860	-.1210	-.0670	-.0650
169.000	1.0460								-.4070						
172.000	1.0460						.5520								
180.000	1.0460	.3620	-.2510	-.1000	.0710	.4590			-.0190		-.5850	-.1960	-.1860	-.1430	-.1340

X/LB	.5873	.6626	.7380	7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0380							-.0960		-.1400
40.000	.0730	.0230		-.0760	-.1280	-.1680	-.1150			-.1400
70.000		-.2340	-.1850	-.1030	.0440	-.0010	.0100	-.0340		
90.000		-.1760	-.0920	-.0120	.0230	-.0530	-.0420	-.0620		
105.000				.0730	-.0170	-.0700	-.0670	-.0910		
110.000									-.1720	
120.000		-.1270	.0570	.2790	-.1450	-.1290	-.0645	-.0680	-.1340	
135.000				.2400	-.0840	-.1860	-.1060	-.1250		
150.000		-.0690	.0550	.0780	-.1580	-.1400	-.0920	-.1530		
165.000		-.0610		.0950	.0750	-.0680	-.0990	-.1700		
180.000		-.0920	-.0150	.0140						

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBPB03)

MACH (1) = .598 BETA (3) = 5.190

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0630	.5830	.0000	-.4960	-.0350	.0090			.0040		-.0190	-.0140	.0050	.0160	.0390
20.000	1.0630		-.2210	-.4620	-.0400	.0090			.0030		-.0310				
40.000	1.0630		-.2090	-.4210	-.0560	.0020			-.0200		-.1200	-.1140	-.0510	-.0110	.0360
55.000	1.0630		-.2500	-.4460	-.0750	-.0500			-.0770		-.1370				
70.000	1.0630		-.3100	-.4510	-.1200	-.0450			-.0890		-.1870	-.4240	-.1560	-.0840	-.1090
90.000	1.0630	.3560	-.3930	-.4630	-.0690	-.0470			-.1150		-.2210	-.4630	-.1360	-.0720	-.0870
105.000	1.0630														
110.000	1.0630														
120.000	1.0630		-.3510	-.3400	-.0480	-.0240			-.2330		-.3380	-.3040	-.1040	-.0570	-.0530
135.000	1.0630														
142.000	1.0630									-.6500					
150.000	1.0630		-.2620	-.2070	.0130	.1880			-.3480		-.5060	.2000	-.0980	-.0530	-.0420
157.000	1.0630							-.0100							
162.000	1.0630								-.5820						
165.000	1.0630										-.4840	-.1720	-.0990	-.0600	-.0600
169.000	1.0630								-.4890						
172.000	1.0630						.4740								
180.000	1.0630	.3900	-.2310	-.0910	.0770	.4530			-.0140		.5790	-.1900	-.1580	-.1180	-.1330

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0370							-.0970		-.1440
40.000	.0570	.0310		.0430	-.0890	-.1480	-.1220			-.1480
70.000		-.2790	-.2830	-.2430	-.1210	-.1270	-.0860	-.0910		
90.000		-.2010	-.1790	-.2170	-.1835	-.1740	-.1300	-.1250		
105.000				-.2080	-.2380	-.1990	-.1580	-.1590		
110.000									-.2200	
120.000		-.1130	-.0040	-.1580	-.5240	-.2790	-.1640	-.1440	-.1880	
135.000				.3550	-.1670	-.3470	-.2180	-.1940		
150.000		-.0590	.0580	.2260	-.0290	-.3260	-.2490	-.2310		
165.000		-.0660		.1470	.0650	-.3410	-.2800	-.1760		
180.000		-.0880	-.0060	.0210						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPB03)

AMES 11-707 OA12 02A ORBITER FUSELAGE

MACH (1) = .598 BETA (4) = 10.300

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9880	.5490	.0000	-.5180	-.0670	-.0180			-.0220		-.0410	-.0290	-.0130	-.0040	.0210
20.000	.9880		-.3180	-.5010	-.0740	-.0240			-.0230		-.0600				
40.000	.9880		-.3770	-.5200	-.1170	-.0670			-.1030		-.2330	-.2190	-.1430	-.0720	-.0050
55.000	.9880		-.4310	-.5960	-.1620	-.1140			-.1410		-.1840				
70.000	.9880		-.5550	-.6350	-.1870	-.0950			-.1380		-.2210	-.4470	-.1620	-.1010	-.1130
90.000	.9880	.1450	-.6220	-.6400	-.1390	-.1060			-.1740		-.2590	-.4580	-.1320	-.0770	-.0840
105.000	.9880														
110.000	.9880								-.3750		-.3500	-.2970	-.1050	-.0560	-.0550
120.000	.9880		-.5420	-.4900	-.1500	-.1300									
135.000	.9880									-.9550					
142.000	.9880								-.4860		-.4830	-.2200	-.1250	-.0730	-.0670
150.000	.9880		-.3860	-.3080	-.0950	.0410		-.2280							
157.000	.9880								-.7930						
162.000	.9880										-.5330	-.2000	-.1230	-.1310	-.1370
165.000	.9880								-.5670						
169.000	.9880						.3430								
172.000	.9880								-.1050		-.6580	-.2690	-.2780	-.3990	-.2430
180.000	.9880	.3340	-.2750	-.1450	.0140	.3560									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0160							-.1000		-.1520
40.000	.0250	.0140		-.0390	-.0860	-.1430	-.1270			-.1580
70.000		-.2940	-.3230	-.3030	-.1710	-.1660	-.1200	-.1190		
90.000		-.2240	-.2270	-.2740	-.2280	-.2160	-.1660	-.1530		
105.000				-.2870	-.3190	-.2540	-.1920	-.1860		
110.000									-.2420	
120.000		-.1430	-.0480	-.2580	-.7040	-.3560	-.2210	-.1910	-.2260	
135.000				.3870	-.1980	-.4640	-.3020	-.2420		
150.000		-.1180	-.0450	.0610	-.2900	-.5320	-.4020	-.3100		
165.000		-.1510		.0480	-.0540	-.5910	-.4220	-.2200		
180.000		-.1990	-.1270	-.1040						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB03)

MACH (2) = .904 BETA (1) = -10.210

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1550	.7140	.0000	-.7980	-.0140	.0100			-.0190		-.0770	-.0990	-.0690	-.0030	.0470
20.000	1.1550		.1030	-.6000	-.0880	-.0080			-.0320		-.0950				
40.000	1.1550		.3270	-.2750	-.0080	-.0670			-.1010		-.1840	-.2200	-.0680	.0110	.0730
55.000	1.1550		.4280	-.0600	.1900	.2120			.1720		.0600				
70.000	1.1550		.4490	.0220	.2160	.2480			.1940		.0380	-.5590	-.0780	.0380	.0690
90.000	1.1550	.9820	.3830	.0210	.2590	.2780			.2160		.0670	-.7030	-.1020	.0660	-.0150
105.000	1.1550														
110.000	1.1550														
120.000	1.1550		.2480	.0310	.2530	.3560			.3320		-.1800	-.8260	-.1080	-.0740	-.0700
135.000	1.1550														
142.000	1.1550									-.3290					
150.000	1.1550		.0820	-.0490	.1830	.5270			.2210		-.7070	-.6930	-.1140	-.0590	-.0420
157.000	1.1550							.5480							
162.000	1.1550								.0940						
165.000	1.1550										-.5410	-.5460	-.1360	-.0300	-.0160
169.000	1.1550								-.1510						
172.000	1.1550						.6930								
180.000	1.1550	.4960	-.2250	-.1850	.0710	.5370			.1730		-1.1520	-.5090	-.4290	-.2[illegible]0	-.1560

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0560							-.1430		-.1590
40.000	.0940	.0350		-.0930	-.2010	-.2710	-.1680			-.1590
70.000		-.2070	-.3220	-.0860	.0990	.0670	.1030	.0630		
90.000		-.1770	-.1810	.0480	.0610	.0190	.0650	.0460		
105.000				.1600	.0240	-.0080	.0320	.0140		
110.000									-.1800	
120.000		-.1900	.0210	.4310	-.0890	-.0700	.0310	.0230	-.1150	
135.000				.2110	-.0730	-.1390	-.0270	-.0730		
150.000		-.1100	.0630	.0440	-.2240	-.0320	.0330	-.1010		
165.000		-.0770		.1120	.0720	.0440	.0500	-.2170		
180.000		-.1620	-.0420	-.0110						

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AMES 11-7ft OA12 OBA ORBITER FUSELAGE (RBPB03)

MACH (2) = .900 BETA (2) = -5.070

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1940	.7620	.0000	-.6360	.0570	.0420			.0080		-.0520	-.0820	-.0330	.0280	.0750
20.000	1.1940		.0770	-.6680	-.0190	.0310			.0080		-.0600				
40.000	1.1940		.2150	-.4490	.0230	.0210			-.0080		-.1040	-.1690	-.0340	.0410	.1000
55.000	1.1940		.2640	-.2800	.1130	.1460			.0950		-.0210				
70.000	1.1940		.2480	-.2020	.0990	.1640			.0990		-.0620	-.6240	-.1270	-.0620	-.0360
90.000	1.1940	.8510	.1640	-.1970	.1530	.1900			.1100		-.1070	-.7640	-.1310	-.0210	-.0420
105.000	1.1940														
115.000	1.1940														
120.000	1.1940		.0650	-.1330	.1760	.2870			.1850		-.2410	-.8750	-.1670	-.0440	-.0520
135.000	1.1940														
142.000	1.1940									-.6580					
150.000	1.1940		-.0290	-.1760	.1740	.5080			.1670		-.6970	-.6770	-.0770	-.0230	-.0250
157.000	1.1940							.4930							
162.000	1.1940								.0300						
165.000	1.1940										-.7850	-.5120	-.0920	.0010	-.0200
169.000	1.1940								-.1300						
172.000	1.1940						.7350								
180.000	1.1940	.5150	-.2480	-.1960	.1320	.6120			.2050		-1.1910	-.4380	-.2250	-.0470	-.0860

X/LB	.5873	.6626	.7380	.7869	.8233	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0840							-.1240		-.1360
40.000	.1240	.0740		-.0570	-.1580	-.2650	-.3050			-.1440
70.000		-.2760	-.3620	-.2010	-.0470	-.0350	.0390	.0190		
90.000		-.2270	-.2110	-.0650	-.1300	-.0800	-.0010	.0030		
105.000				.0250	-.1960	-.1100	-.0320	-.0310		
115.000									-.1710	
120.000		-.1850	.0150	.2960	-.3090	-.1350	-.0250	-.0230	-.1320	
135.000				.3100	-.0870	-.1460	-.0580	-.0900		
150.000		-.1020	.0630	.1140	-.1560	-.1420	-.0680	-.1520		
165.000		-.0810		.1310	.0650	-.1060	-.0870	-.1950		
180.000		- 1060	.0060	.0540						

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBPB03)

MACH (2) = .901 BETA (3) = 5.250

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2020	.7440	.0000	-.6190	.0430	.0430			.0090		-.0570	-.0760	-.0330	.0260	.0750
20.000	1.2020		-.0420	-.6260	.0290	.0410			.0130		-.0710				
40.000	1.2020		-.0440	-.7080	.0340	.0420			-.0010		-.1600	-.1960	-.1050	.0020	.0730
55.000	1.2020		-.0840	-.7180	.0140	.0220			-.0390		-.1990				
70.000	1.2020		-.1440	-.6560	.0020	.0350			-.0470		-.2910	-.6960	-.1430	-.0430	-.0440
90.000	1.2020	.5330	-.2280	-.6090	.0270	.0500			-.0590		-.3690	-.7880	-.1460	-.0200	-.0260
105.000	1.2020														
110.000	1.2020														
120.000	1.2020		-.2530	-.5560	.0310	.1140			-.1160		-.5660	-.7110	-.1760	.0030	-.0040
135.000	1.2020														
142.000	1.2020									-1.1410					
150.000	1.2020		-.2080	-.3850	.0780	.3590			.0010		-.6010	-.5600	-.2800	.0290	.0670
157.000	1.2020							.2360							
162.000	1.2020								-.1850						
165.000	1.2020										-.6320	-.5510	-.2480	.0270	-.0100
169.000	1.2020								-.1330						
172.000	1.2020						.6620								
180.000	1.2020	.5330	-.2270	-.1560	.1410	.6060			.2010		-1.2100	-.4240	-.2230	-.0310	-.0780

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0840							-.1170		-.1340
40.000	.1040	.0850		-.0280	-.1090	-.2510	-.3600			-.1590
70.000		-.2660	-.2800	-.3110	-.2840	-.5250	-.1520	-.0870		
90.000		-.1880	-.1630	-.2380	-.3730	-.5480	-.1870	-.1040		
105.000				-.2060	-.4370	-.5560	-.2260	-.1300		
110.000									-.2260	
120.000		-.1110	-.0020	-.1290	-.5810	-.6230	-.3510	-.1180	-.1820	
135.000				.3520	-.0820	-.6620	-.5330	-.1530		
150.000		-.0630	.0530	.2230	.0010	-.4700	-.4850	-.2130		
165.000		-.0680		.1630	.0890	-.4330	-.4320	-.1870		
180.000		-.0920	.0130	.0590						

AMES 11-7ft OA12 OEA ORBITER FUSELAGE (RBPB03)

MACH (2) = .904 BETA (4) = 10.430

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1600	.7050	.0000	-.7590	-.0050	.0110			-.0150		-.0830	-.1010	-.0650	-.0480	.0460
20.000	1.1600		-.1070	-.7390	.0160	.0120			-.0120		-.1000				
40.000	1.1600		-.1640	-.7600	-.0380	-.0110			-.0630		-.2640	-.2990	-.2450	-.0720	.0240
55.000	1.1600		-.2460	-.7280	-.1840	-.0300			-.0940		-.2650				
70.000	1.1600		-.3390	-.6810	-.2810	-.0030			-.0970		-.3550	-.7450	-.1780	-.0750	-.0470
90.000	1.1600	.3620	-.4000	-.6490	-.2640	-.0060			-.1240		-.4240	-.8000	-.1830	-.0310	-.0270
105.000	1.1600														
110.000	1.1600														
120.000	1.1600		-.3960	-.6490	-.1110	.0030			-.2590		-.5520	-.5300	-.3130	.0010	-.0060
135.000	1.1600														
142.000	1.1600									-.9200					
150.000	1.1600		-.2940	-.4780	-.0480	.2180			-.1270		-.7170	-.5790	-.3760	-.0130	-.0540
157.000	1.1600							.0480							
162.000	1.1600								-.3050						
165.000	1.1600										-.6690	-.5590	-.3290	-.0670	-.0830
169.000	1.1600								360						
172.000	1.1600						.5370								
180.000	1.1600	.5160	-.2270	-.1760	.0660	.5170			.1580		-1.0130	-.5260	-.3860	-.2710	-.1530

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0540							-.1350		-.1580
40.000	.0580	.0570		-.0310	-.1000	-.2460	-.3290			-.1900
70.000		-.2550	-.2750	-.3160	-.3030	-.5570	-.3530	-.1460		
90.000		-.1860	-.1790	-.2530	-.4000	-.5600	-.5620	-.1460		
105.000				-.2190	-.4830	-.5710	-.6220	-.1770		
110.000									-.2390	
120.000		-.1130	-.0170	-.0900	-.6010	-.6620	-.6180	-.2510	-.1980	
135.000				.3630	.0050	-.6720	-.6240	-.5080		
150.000		-.1460	-.0460	.0190	-.2360	-.6170	-.7100	-.4410		
165.000		-.1330		.0760	.0090	-.5520	-.5690	-.2530		
180.000		-.1710	-.0420	-.0070						

AMES 11-7D7 OA12 O2A ORBITER FUSELAGE (RBPB04) (01 MAY 73)

REFERENCE DATA

SREF = 2.421U SQ.FT. XMRP = 28.5350 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .03U SCALE

PARAMETRIC DATA

ALPHA = 10.000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

MACH (1) = .598 BETA (1) = -10.110

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9830	7160	.0000	-.3150	.0250	.0600			.0500		.0290	.0360	.0570	.0660	.0930
20.000	.9830		.1900	-.2100	.0300	.0700			.0660		.0350				
40.000	.9830		.3980	.0040	.1340	.1010			.0930		.0480	.0710	.1070	.1240	.1610
55.000	.9830		.4510	.1020	.2280	.2080			.1730		.0840				
70.000	.9830		.4060	.0880	.1720	.1940			.1460		.0130	-.2920	-.0960	-.0440	-.1260
90.000	.9830	.8320	.2640	.0000	.1880	.1800			.1350		-.0480	-.4390	-.1620	-.1250	-.1830
105.000	.9830														
110.000	.9830														
120.000	.9830		.0060	-.0940	.1070	.1820			.2430		-.3990	-.4460	-.2550	-.2340	-.2560
135.000	.9830														
142.000	.9830									-.4370					
150.000	.9830		-.2145	-.1980	.0160	.3070			-.1380		-.8570	-.2760	-.1790	-.1530	-.1440
157.000	.9830							.2660							
162.000	.9830								-.3160						
165.000	.9830										-.4830	-.2270	-.1710	-.1380	-.1260
169.000	.9830								-.5510						
172.000	.9830						.4370								
180.000	.9830	.1030	-.5060	-.2860	-.0660	.3210			-.1890		-.7100	-.2920	-.4630	-.3570	-.2260

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1020							-.0740		-.1440
40.000	.1740	.1320		.0080	-.0630	-.1050	-.0740			-.1350
70.000		-.3060	-.1850	-.0440	.1250	.0690	.0680	.0120		
90.000		-.2600	-.1020	.0630	.1220	.0270	.0070	-.0360		
110.000				.2060	.1060	.0080	-.0150	-.0620	-.1680	
120.000		-.2660	-.0170	.4290	.0120	-.0870	-.0500	-.0550	-.1240	
135.000				-.0450	-.2440	-.2940	-.1910	-.2130		
150.000		-.1510	-.0350	-.0890	-.3290	-.1200	-.0620	-.1450		
165.000		-.1380		-.0170	-.0130	-.0190	-.0300	-.1970		
180.000		-.2230	-.1280	-.1170						

AMES 11-7D7 OA12 O2A ORBITER FUSELAGE (RBPB64)

MACH (1) = .598 BETA (2) = -5.020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9890	.7930	.0000	-.2680	.0670	.0920			.0790		.0600	.0580	.0740	.0900	.1190
20.000	.9890		.1910	-.1970	.0790	.0980			.0900		.0570				
40.000	.9890		.3000	-.0640	.1280	.1300			.1150		.0380	.0270	.0840	.1130	.1540
55.000	.9890		.2930	-.0490	.1320	.1060			.0700		-.0060				
70.000	.9890		.2030	-.0860	.0440	.1020			.0580		-.0740	-.3870	-.1620	-.1200	-.1800
90.000	.9890	.6900	.0440	-.1680	.0850	.0950			.0480		-.1420	-.5100	-.2090	-.1620	-.1950
105.000	.9890														
110.000	.9890														
120.000	.9890		-.1570	-.1960	.0530	.1360			.1220		-.4400	-.4270	-.2340	-.1990	-.2110
135.000	.9890														
142.000	.9890									-.5130					
150.000	.9890		-.2970	-.2360	.0270	.3090			-.2230		-.7790	-.2620	-.1620	-.1220	-.1270
157.000	.9890							.2260							
162.000	.9890								-.4040						
165.000	.9890										-.4950	-.2130	-.1470	-.1010	-.1290
169.000	.9890								-.5660						
172.000	.9890						.4880								
180.000	.9890	.1270	-.4910	-.1830	-.0070	.4050			-.1400		-.6060	-.2060	-.1940	-.2060	-.1310

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1240							-.0680		-.1310
40.000	.1780	.1500		.0260	-.0400	-.1090	-.0810			-.1260
70.000		-.4180	-.3030	-.1740	.0130	-.0210	.0070	-.0240		
90.000		-.3030	-.1640	-.0470	.0690	-.0580	-.0340	-.0610		
105.000				.0720	-.0170	-.0780	-.0680	-.0950		
110.000									-.1760	
120.000		-.2380	-.0070	.3010	-.1300	-.1440	-.0790	-.0760	-.1410	
135.000				.1260	-.1770	-.2480	-.1570	-.1640		
150.000		-.1380	-.0050	.0010	-.2400	-.1760	-.1120	-.1600		
165.000		-.1340		.0200	.0050	-.1170	-.1270	-.1740		
180.000		-.1170	-.0370	-.0230						

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBPB04)

MACH (1) = .596 BETA (3) = 5.170

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0100	.7660	.0000	-.2800	.0670	.0860			.0700		.0540	.0560	.0760	.0840	.1190
25.000	1.0100		.0330	-.2640	.0550	.0770			.0660		.0330				
40.000	1.0100		-.0260	-.2790	-.0050	.0260			-.0160		-.1580	-.1780	-.0810	-.0620	.0810
55.000	1.0100		-.1380	-.3850	-.1010	-.0970			-.1220		-.1720				
70.000	1.0100		-.2870	-.4280	-.1690	-.0500			-.0970		-.2050	-.4790	-.2340	-.1940	-.2300
90.000	1.0100	.3170	-.4330	-.4760	-.0780	-.0390			-.1020		-.2510	-.5410	-.2060	-.1530	-.1800
105.000	1.0100														
110.000	1.0100														
120.000	1.0100		-.4920	-.4340	-.0590	.0030			-.1510		-.4270	-.3340	-.1530	-.1020	-.1150
135.000	1.0100														
142.000	1.0100									-.6430					
150.000	1.0100		-.4580	-.3620	-.0340	.1880			-.4080		-.5850	-.2030	-.1080	-.0660	-.0850
157.000	1.0100							-.0170							
162.000	1.0100								-.6790						
165.000	1.0100										-.5220	-.1810	-.1160	-.0660	-.0910
169.000	1.0100								-.6280						
172.000	1.0100						.4190								
180.000	1.0100	.1600	-.4700	-.2280	-.0040	.4010			-.1410		-.5990	-.1920	-.1720	-.1760	-.1370

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1200							-.0660		-.1340
40.000	.1150	.1190		.0360	-.0120	-.1020	-.0880			-.1350
70.000		-.4430	-.3870	-.3340	-.1930	-.1890	-.1090	-.1090		
90.000		-.3340	-.2690	-.3180	-.2650	-.2120	-.1420	-.1300		
105.000				-.3130	-.2780	-.2240	-.1710	-.1690		
110.000									-.2240	
120.000		-.2030	-.0730	-.2160	-.5210	-.2990	-.1740	-.1520	-.1910	
135.000				.3210	-.1750	-.3440	-.2100	-.1880		
150.000		-.1070	.0170	.2110	-.1060	-.3490	-.2570	-.2330		
165.000		-.1050		.1130	.0460	-.3500	-.2760	-.1760		
180.000		-.1190	-.0380	-.0190						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB04)

MACH (1) = .597 BETA (4) = 10.270

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9510	.7040	.0000	-.3190	.0260	.0540			.0470		.0220	.0330	.0490	.0540	.0910
20.000	.9510		-.0750	-.3280	-.0030	.0260			.0200		-.0130				
40.000	.9510		-.1990	-.4090	-.1000	-.0890			-.1520		-.3360	-.3300	-.2290	-.1040	.0090
59.000	.9510		-.3220	-.5420	-.2030	-.1960			-.2020		-.2520				
70.000	.9510		-.5050	-.6050	-.2520	-.1060			-.1590		-.2460	-.5100	-.2580	-.2160	-.2510
90.000	.9510	.1190	-.6650	-.6540	-.1420	-.0930			-.1620		-.2780	-.5360	-.1970	-.1530	-.1630
105.000	.9510														
110.000	.9510														
120.000	.9510		-.6780	-.5770	-.1310	-.0830			-.2750		-.4210	-.3200	-.1290	-.0890	-.1110
135.000	.9510														
142.000	.9510									-.9400					
150.000	.9510		-.5670	-.4630	-.1250	.0620			-.5230		-.5370	-.2100	-.1210	-.0870	-.1060
157.000	.9510							-.2090							
162.000	.9510								-.8740						
165.000	.9510										-.5450	-.1970	-.1230	-.1050	-.1550
169.000	.9510								-.7090						
172.000	.9510						.2900								
180.000	.9510	.1210	-.5190	-.2860	-.0680	.3040			-.2110		-.6950	-.2740	-.3790	-.3960	-.2370

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0340							-.0740		-.1460
40.000	.0540	.0750		.0330	-.0180	-.1040	-.0990			-.1490
70.000		-.4600	-.4430	-.4110	-.2460	-.2250	-.1390	-.1290		
90.000		-.3720	-.3560	-.3940	-.3120	-.2640	-.1880	-.1720		
105.000				-.3800	-.3910	-.2950	-.2220	-.2080		
110.000									-.2640	
120.000		-.2230	-.1030	-.2980	-.7360	-.3970	-.2450	-.2060	-.2260	
135.000				.3410	-.1830	-.4450	-.2880	-.2330		
150.000		-.1690	-.0680	.0510	-.3360	-.5930	-.4930	-.3990		
165.000		-.1660		.0190	-.0820	-.5930	-.4320	-.2230		
180.000		-.2250	-.1330	-.1210						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBPBU4)

MACH (2) = .902 BETA (1) = -10.230

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0440	.0675	.0988	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI									.0650		.0250	-.0060	.0110	.0620	.1280
.000	1.1330	.8500	.4000	-.4980	.0540	.0920			.0780		.0220				
20.000	1.1330		.3070	-.3150	.0540	.1010			.1040		.0270	-.0240	.0530	.1180	.1890
40.000	1.1330		.4850	-.0380	.1670	.1310			.2280		.1200				
55.000	1.1330		.5350	.0790	.2580	.2670			.2260		.0670	-.5270	-.1740	-.0150	-.0390
70.000	1.1330		.4860	.0760	.2010	.2660			.2370		.0030	-.6890	-.2610	-.0780	-.0450
90.000	1.1330	.9500	.3410	-.0190	.2280	.2720									
105.000	1.1330														
110.000	1.1330								.3640		-.3080	-.8650	-.2880	-.1780	-.1720
120.000	1.1330		.0890	-.1160	.1650	.3100									
135.000	1.1330									-.3810					
142.000	1.1330								.1510		-.7780	-.7720	-.2880	-.0730	-.1480
150.000	1.1330		-.1180	-.3270	.0870	.4760		.4960							
157.000	1.1330								.0240						
162.000	1.1330										-.5480	-.5940	-.2970	-.0510	-.0680
165.000	1.1330								-.2520						
169.000	1.1330						.6490								
172.000	1.1330								.0860		-1.0320	-.5920	-.4450	-.1860	-.1470
180.000	1.1330	.3220	-.4250	-.5110	.0080	.5040									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI								-.1540		-.1630
.000	.1440									-.1560
40.000	.2230	.1820		.0260	-.0880	-.1850	-.2460			
70.000		-.3240	-.5580	-.0570	.1030	-.0560	-.0070	-.0200		
90.000		.3060	-.4980	.0690	.0480	-.0830	-.0280	-.0190		
105.000				.1210	.0770	-.1230	-.0590	-.0440		
110.000									-.1930	
120.000		-.3700	-.1040	.4670	-.0210	-.2350	-.0480	-.0300	-.1290	
135.000				.1270	-.1380	-.1820	-.1190	-.1430		
150.000		-.2240	-.0120	-.0290	-.3010	-.0900	-.0260	-.1440		
165.000		-.1940		.0340	.0080	-.0430	-.0490	-.2230		
[illegible]		[illegible]	-.0670	-.0220						

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBPBU4)

MACH (2) = .900 BETA (2) = -5.070

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3993	.5120
PHI															
.000	1.1720	.8940	.0000	-.4550	.1010	.1200			.0950		.0440	.0090	.0350	.0860	.1520
20.000	1.1720		.2790	-.3620	.0990	.1270			.1030		.0420				
40.000	1.1720		.3770	-.1600	.1490	.1610			.1330		.0340	-.0430	.0330	.1110	.1870
55.000	1.1720		.3690	-.1170	.1630	.1750			.1360		.0270				
70.000	1.1720		.2900	-.1390	.0830	.1830			.1350		-.0320	-.5980	-.3620	-.0640	-.0760
90.000	1.1720	.8220	.1300	-.2250	.1350	.1990			.1490		-.0120	-.7370	-.3130	-.0950	-.0960
105.000	1.1720														
110.000	1.1720														
125.000	1.1720		-.0790	-.2950	.1210	.2710			.2580		-.3920	-.9000	-.3360	-.1150	-.1150
135.000	1.1720														
142.000	1.1720									-.6400					
150.000	1.1720		-.2160	-.4550	.1060	.4760			.1170		-.8070	-.7090	-.2830	-.0340	-.0540
157.000	1.1720							.4680							
162.000	1.1720								-.0240						
165.000	1.1720										-.7850	-.5060	-.2810	.0170	-.0580
169.000	1.1720								-.2220						
172.000	1.1720						.6910								
180.000	1.1720	.3340	-.4380	-.5050	.0830	.5690			.1230		-1.1230	-.4760	-.2510	-.0820	-.0610

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1690							-.1920		-.1540
40.000	.2230	.2050		.0510	-.0510	-.1750	-.2940			-.1460
70.000		-.3680	-.6240	-.1890	-.0680	-.2160	-.1000	-.0700		
90.000		-.2980	-.5150	-.0370	-.0540	-.2440	-.1130	-.0730		
105.000				-.0110	-.0470	-.2860	-.1290	-.1000		
110.000									-.2060	
120.000		-.3090	-.0910	.3310	-.1710	-.3780	-.0960	-.0820	-.1550	
135.000				.2490	-.0980	-.4730	-.1230	-.1440		
150.000		-.1970	-.0120	.0350	-.2020	-.2310	-.1030	-.1780		
165.000		-.1800		.0810	-.0010	-.1960	-.1500	-.1970		
180.000		-.1550	-.0520	.0150						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB04)

MACH (2) = .962 BETA (3) = 5.23U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1450	.8910	.0000	-.4680	.0970	.1190			.0980		.0410	.0080	.0330	.0860	.1530
20.000	1.1450		.1450	-.4620	.0830	.1130			.0930		.0200				
40.000	1.1450		.0970	-.5170	.0380	.0840			.0370		-.1410	-.1870	-.1620	.0090	.1210
55.000	1.1450		.0050	-.6410	-.0490	-.0080			-.0350		-.1610				
70.000	1.1450		-.1120	-.6350	-.0890	.0480			-.0100		-.2230	-.6990	-.3380	-.1350	-.1330
90.000	1.1450	.5090	-.2540	-.6160	.0070	.0780			-.0440		-.3070	-.8320	-.2310	-.0890	-.0800
105.000	1.1450														
110.000	1.1450								-.0210		-.0220	-.8370	-.2100	-.0320	-.0320
120.000	1.1450		-.3750	-.5880	.0550	.1530									
135.000	1.1450									-.9940					
142.000	1.1450								-.0200		-.6280	-.5550	-.3110	.0200	-.0090
150.000	1.1450		-.3800	-.5920	.0670	.3660		.2560							
157.000	1.1450								-.2220						
162.000	1.1450										-.6060	.5690	-.2930	.0290	-.0100
165.000	1.1450								-.2110						
169.000	1.1450						.6250								
172.000	1.1450								.1130		-1.1190	-.4590	.2870	-.0740	-.0660
180.000	1.1450	.3580	-.4380	-.4780	.0000	.5620									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1660							-.1890		-.1470
40.000	.1580	.1840		.0750	-.0130	-.1680	-.3150			-.1800
70.000		-.3970	-.5340	-.3070	-.3170	-.5090	-.5180	-.1670		
90.000		-.3050	-.3570	-.2940	-.3850	-.4880	-.5700	-.1630		
105.000				-.2820	-.4030	-.4990	-.5640	-.2180		
110.000									-.2420	
120.000		-.2020	-.1120	.1690	-.5200	-.5780	-.4770	-.3280	-.1940	
135.000				.2780	-.1010	-.6060	-.4780	-.3620		
150.000		-.1370	-.0170	.2040	-.0360	-.4770	-.4290	-.3190		
165.000		-.1300		.1200	.0500	-.4270	-.3980	-.1940		
180.000		-.1570	-.0550	.0080						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7ft OA12 OBA ORBITER FUSELAGE (RBPB04)

MACH (2) = .907 BETA (4) = 10.390

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3206	.3953	.5125
PHI															
.000	1.1360	.8470	.6000	-.4900	.0580	.0870			.0790		.0180	-.0640	.0120	.0960	.1270
25.000	1.1360		.0660	-.5340	.0250	.0740			.0610		-.0120				
40.000	1.1360		-.0380	-.6340	-.0740	-.0170			-.0580		-.2890	-.3190	-.2990	-.1020	.0530
55.000	1.1360		-.1620	-.7160	-.1930	-.0860			-.0950		-.2400				
70.000	1.1360		-.2980	-.7230	-.2510	.0010			-.0610		-.2640	-.7290	-.4260	-.1780	-.1440
90.000	1.1360	.3530	-.4190	-.6270	-.2560	.0330			-.0630		-.3250	-.6630	-.2620	-.1040	-.0960
105.000	1.1360														
110.000	1.1360								-.1410		-.4990	-.6060	-.3280	-.1490	-.0430
120.000	1.1360		-.4950	-.6670	-.0850	.0790									
135.000	1.1360									-.7520					
142.000	1.1360								-.1280		-.7310	-.5980	-.3850	-.0280	-.0500
150.000	1.1360		-.4570	-.6670	-.0410	.2520		.0730							
157.000	1.1360								-.3380						
162.000	1.1360										-.5060	-.5660	-.3630	-.0510	-.0570
165.000	1.1360								-.2380						
169.000	1.1360						.5070								
172.000	1.1360								.0690		-1.0770	-.5210	-.4570	-.2190	-.1460
180.000	1.1360	.3400	-.4370	-.4840	.0000	.4840									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1480							-.1530		-.1610
4.000	.1480	.1330		.0710	-.0120	-.1590	-.3090			-.2140
7.000		-.3740	-.5220	-.3880	-.3270	-.5290	-.5990	-.1880		
9.000		-.3110	-.3870	-.3610	-.4640	-.5160	-.5970	-.2720		
11.500				-.3250	-.5190	-.5220	-.5830	-.3310		
110.000									-.2440	
120.000		-.2080	-.1310	-.1840	-.5930	-.6450	-.5920	-.5860	-.1920	
135.000				.3270	-.0190	-.6130	-.5310	-.4890		
150.000		-.1870	-.0800	.0520	-.2430	-.5930	-.6290	-.4160		
165.000		-.1760		.0450	-.0280	-.5390	-.5370	-.2520		
180.000		-.2170	-.0890	-.0390						

AMES 11-7X7 OA12 CEA ORBITER FUSELAGE (RBPBUS) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.849[illegible] INCHES YMRP = .0000 INCHES
BREF = 39.849[illegible] INCHES ZMRP = .0000 INCHES
SCALE = .03[illegible] SCALE

PARAMETRIC DATA

ALPHA = 15.000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

MACH (1) = .599 BETA (1) = -10.090

SECTION 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1706	.1581	.1732	.1958	.2259	.2711	.3266	.3953	.5125
PHI															
.000	.8970	.8770	.[illegible]	-.1140	.1370	.1470			.1320		.1190	.1130	.1360	.1300	.1780
25.000	.8970		.4110	.0030	.1490	.1760			.1640		.1410				
40.000	.8970		.5590	.1820	.2680	.2410			.2280		.1690	.1480	.1980	.2220	.2620
55.000	.8970		.5620	.1900	.2570	.1980			.1620		.[illegible]830				
70.000	.8970		.4270	.0960	.1280	.1760			.1340		-.[illegible]690	-.3310	-.1710	-.1320	-.2390
90.000	.8970	.7640	.1880	-.0610	.1210	.1330			.1030		-.[illegible]980	.5350	-.2810	-.2370	-.2710
105.000	.8970														
110.000	.8970														
120.000	.8970		-.1730	-.2250	-.[illegible]020	.1000			.2460		-.[illegible]5510	-.5560	-.3820	-.3620	-.3780
135.000	.8970														
142.[illegible]	.8970									-.5220					
150.[illegible]	.8970		-.4210	-.3520	-.[illegible]820	.2480			-.2340		-1.[illegible]4440	-.3150	-.2240	-.1910	-.2050
157.[illegible]	.8970							.1890							
162.[illegible]	.8970								-.4250						
165.000	.8970										-.5390	-.2680	-.2010	-.2050	-.2140
169.000	.8970								-.6940						
172.000	.8970						.3800								
180.000	.8970	-.1150	-.7090	-.2480	-.1230	.2820			-.2910		-.7010	-.2810	-.5430	-.2450	-.1520

X/LB	.5873	.6626	.7383	.7889	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
.000	.1[illegible]60							-.0480		-.1270
40.000	.2920	.2520		.0900	.0120	-.0740	-.0530			-.1120
70.000		-.6140	-.4370	-.2900	-.0740	-.0890	-.0450	-.0600		
90.000		-.3350	-.1750	-.0380	.0130	-.0530	-.0480	-.0750		
[illegible]5.[illegible]				.1690	.0170	-.0700	-.0750	-.1020		
110.000									-.2060	
120.000		-.3530	-.0780	.4020	.0010	-.1320	-.0810	-.0690	-.1380	
135.000				-.1300	-.3460	-.3870	-.2620	-.2010		
150.000		-.2590	-.0870	-.1360	-.4030	-.1670	-.1070	-.1870		
165.000		-.2110		-.0710	-.0680	-.0700	-.0620	-.2170		
180.000		-.1080	-.1220	-.1190						

AMES 11-7D7 OA12 OEA ORBITER FUSELAGE (RBP0.5)

MACH (1) = .990 BETA (2) = -5.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5125
PHI															
.000	.9290	.9340	.0000	-.0740	.1790	.1820			.1630		.1390	.1380	.1970	.1730	.0870
20.000	.9290		.4030	.0150	.1830	.1940			.1840		.1900				
40.000	.9290		.4530	.0980	.2260	.2270			.1980		.0870	.0580	.1290	.1800	.2370
55.000	.9290		.3880	.0260	.1260	.0600			.0370		-.0290				
70.000	.9290		.2190	-.0890	-.0690	.0780			.0350		-.0990	-.4330	-.2490	-.2050	-.3270
90.000	.9290	.6180	-.0320	-.2320	.0270	.0580			.0150		-.1830	-.6080	-.3160	-.2730	-.2810
105.000	.9290														
110.000	.9290														
125.000	.9290		-.3380	-.3120	-.0350	.0730			.1460		-.5820	-.5320	-.3360	-.3040	-.2990
135.000	.9290									-.5760					
142.000	.9290														
150.000	.9290		-.4990	-.4140	-.0540	.2630			-.3010		-.9010	-.2850	-.1900	-.1650	-.1820
157.000	.9290							.1730							
162.000	.9290								-.5000						
165.000	.9290										-.5190	-.2290	-.1990	-.1170	-.1900
169.000	.9290								-.6990						
172.000	.9290						.4370								
180.000	.9290	-.1040	-.7040	-.2390	-.0630	.3610			-.2370		-.6010	-.1900	-.1040	-.1970	-.1090

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2150							-.0540		-.1210
40.000	.2690	.2530		.1100	.0270	-.0670	-.0590			-.1200
70.000		-.6350	-.4990	-.3810	-.1920	-.2340	-.1770	-.1360		
90.000		-.4190	-.3060	-.2190	-.1670	-.2030	-.1510	-.1390		
105.000				-.0250	-.1640	-.2030	-.1690	-.1680		
110.000									-.2390	
125.000		-.3000	-.0490	.2430	-.1850	-.2270	-.1390	-.1170	-.1610	
135.000				.0840	-.2440	-.3290	-.2160	-.2140		
150.000		-.1890	-.0450	-.0380	-.2950	-.2210	-.1550	-.2030		
165.000		-.1810		-.0280	-.0390	-.2010	-.1780	-.2080		
180.000		-.1240	-.0510	-.0540						

DATE 17 SEP 75 TABULATED PRESSURE DATA - OA12A (RBPB05)

AMES 11-7D7 OA12 02A ORBITER FUSELAGE

MACH (1) = .996 BETA (3) = 5.18D

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0802	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9715	.9040	.0000	-.0870	.1680	.1760			.1640		.1310	.1410	.1500	.1670	.2000
25.000	.9715		.2380	-.0790	.1410	.1510			.1440		.0960				
40.000	.9715		.1190	-.1640	.0340	.0220			-.0330		-.2440	-.2590	-.1420	.0000	.1210
55.000	.9715		-.0600	-.3500	-.1350	-.2050			-.1890		-.2380				
70.000	.9715		-.2530	-.4580	-.2420	-.1870			-.1200		-.2380	-.5500	-.3350	-.2920	-.4140
90.000	.9715	.2550	-.4320	-.5320	-.1110	-.0590			-.1110		-.2740	-.6280	-.3660	-.2510	-.2740
105.000	.9715														
110.000	.9715								-.0880		-.5150	-.3920	-.1890	-.1580	-.1710
120.000	.9715		-.6300	-.5400	-.0840	.0030									
135.000	.9715									-.6580					
142.000	.9715								-.4560		-.6540	-.2130	-.1150	-.0860	-.1040
150.000	.9715		-.6260	-.3610	-.0670	.1830		-.0170							
157.000	.9715								-.7520		-.5330	-.1850	-.1250	-.0760	-.1010
162.000	.9715														
165.000	.9715								-.7440						
169.000	.9715						.3730								
172.000	.9715								-.2410		-.5930	-.1870	-.1750	-.1690	-.1130
180.000	.9715	-.1720	-.6710	-.2420	-.0570	.3550									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2150							-.1470		-.1260
40.000	.1780	.2520		.1190	.0460	-.0590	-.0770			-.1320
70.000		-.6040	-.5250	-.4880	-.3510	-.3310	-.2420	-.1790		
90.000		-.4920	-.4440	-.4940	-.4260	-.3500	-.2450	-.1850		
105.000				-.4470	-.4040	-.3340	-.2690	-.2280		
110.000									-.2900	
120.000		-.2730	-.1540	-.3530	-.6220	-.4040	-.2600	-.2090	-.2280	
135.000				.3120	-.1840	-.3800	-.2500	-.2190		
150.000		-.1440	-.0050	.2230	-.1700	-.3790	-.2980	-.2560		
165.000		-.1300		.0960	.0220	-.3730	-.3060	-.2150		
180.000		-.1280	-.0510	-.0500						

AMES 11-7ft OA12 OEA ORBITER FUSELAGE (RBPBUS)

MACH (1) = .800 BETA (4) = 10.290

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1906	.1581	.1732	.1958	.2259	.2711	.3250	.3953	.5120
PHI															
.000	.9160	.8370	.0000	-.1290	.1390	.1480			.1340		.1060	.1130	.1330	.1420	.1750
25.000	.9160		.1380	-.1440	.0760	.0970			.0920		.0510				
40.000	.9160		-.0620	-.3020	-.1190	-.1500			-.2310		-.4890	-.4840	-.3320	-.1390	.0390
55.000	.9160		-.2670	-.5440	-.2830	-.3450			-.3030		-.3590				
70.000	.9160		-.5030	-.6440	-.3410	-.1520			-.1780		-.2960	-.5780	-.3820	-.3420	-.4320
90.000	.9160	.1650	-.7210	-.7030	-.1680	-.1070			-.1670		-.3080	-.6320	-.2830	-.2380	-.2960
105.000	.9160														
110.000	.9160														
120.000	.9160		-.8110	-.6730	-.1240	-.0560			-.1940		-.4950	-.3570	-.1600	-.1460	-.2160
135.000	.9160									-.8480					
142.000	.9160														
150.000	.9160		-.7240	-.9480	-.1220	.0480			-.5570		-.5760	-.1990	-.1030	-.0920	-.1230
157.000	.9160							-.2030							
162.000	.9160								-.9470						
165.000	.9160										-.5610	-.1900	-.1010	-.1010	-.1400
169.000	.9160								-.8190						
172.000	.9160						.2500								
180.000	.9160	-.1040	-.7110	-.3070	-.1280	.2620			-.3190		-.6810	-.2780	-.5300	-.2750	-.2120

X/LB	.5073	.6826	.7580	.7880	.8283	.8648	.9262	.9639	1.0015	1.0392
PHI										
.000	.1860							-.1480		-.1960
40.000	.1940	.1440		.1140	.0430	-.0820	-.1490			-.1450
70.000		-.6110	-.5510	-.5340	-.3720	-.3510	-.2470	-.1920		
90.000		-.5560	-.5180	-.5730	-.4650	-.3840	-.2880	-.2140		
105.000				-.5420	-.5110	-.3980	-.3130	-.2610		
110.000									-.3130	
120.000		-.3410	-.1540	-.3500	-.0470	-.0650	-.3240	-.2630	-.2760	
135.000				.3070	-.2140	-.4820	-.3220	-.2650		
150.000		-.1990	-.0750	.1980	-.3890	-.5720	-.4550	-.3670		
165.000		-.1870		.0490	-.1480	-.5080	-.4720	-.2320		
180.000		-.2050	-.1410	-.1360						

AMES 11-7D7 OA12 CEA ORBITER FUSELAGE (REPROD)

MACH (2) = .904 DELTA (1) = -15.200

SECTION : 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0440	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3258	.3993	.5125
PHI															
.000	1.0770	.8705	.0660	-.1480	.1880	.1910			.1880		.1340	.1180	.1150	680	.2250
20.000	1.0770		.5140	-.0130	.2040	.2150			.2480		.1540				
40.000	1.0770		.6440	.1800	.3030	.2850			.2720		.1810	.1250	.1720	.2220	.3440
55.000	1.0770		.6270	.1980	.2970	.2710			.2430		.1590				
70.000	1.0770		.5160	.1110	.1690	.2570			.2380		.0920	-.4070	-.2030	-.1010	-.1170
90.000	1.0770	.8980	.2990	-.0720	.1730	.2340			.2370		.0460	-.6780	-.4190	-.1920	-.1490
105.000	1.0770														
110.000	1.0770														
120.000	1.0770		-.0620	-.2800	.0470	.2380			.4240		-.3970	-.9440	-.5820	-.3440	-.2710
135.000	1.0770														
142.000	1.0770									-.4340					
150.000	1.0770		-.3050	-.5810	-.0180	.4230			.6040		-.9350	-.6320	-.4230	-.1270	-.1310
157.000	1.0770							.4410							
162.000	1.0770								-.0350						
165.000	1.0770										-.5730	-.5570	-.4080	-.1180	-.1380
180.000	1.0770								-.3290						
172.000	1.0770						.5090								
180.000	1.0770	.1380	-.6150	-.7250	-.0440	.4530			-.0420		-.9390	-.6800	-.4580	-.1210	-.1170

X/LB	.5073	.6026	.7500	.7988	.8293	.8848	.9282	.9639	1.0015	1.0382
PHI										
.000	.2380							-.1630		-.1820
20.000	.3380	.3180		.1380	.0280	-.1240	-.1830			-.1570
70.000		-.0280	-.0480	-.4230	-.2280	-.4250	-.3950	-.2490		
90.000		-.3080	-.4080	.0230	-.1570	-.3240	-.4280	-.1290		
105.000				.2540	-.0390	-.3200	-.4430	-.1370		
110.000									-.2710	
120.000		-.4790	-.1180	.5200	-.0170	-.3750	-.4480	-.0630	-.1750	
135.000				-.0040	-.2550	-.0310	-.2840	-.1010		
150.000		-.2970	-.0870	-.0570	-.3900	-.3480	-.1270	-.1790		
165.000		-.2840		-.0170	-.0480	-.2330	-.1150	-.2990		
180.000		-.2280	-.0980	-.0620						

AMES 11-7D7 OA12 OBA ORBITER FUSELAGE (RBPBUS)

MACH (2) = .9U2 BETA (2) = -5.0%

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.1448	.1675	.0180	.0339	.0482	.1355	.1508	.1501	.1732	.1958	.2259	.2711	.3200	.3993	.5125
PHI															
.1448	1.1125	1.1025	.1440	-.1110	.2050	.2190			.1900		.1930	.1310	.1380	.1790	.2470
20.1448	1.1125		.4950	-.1070	.2200	.2320			.2220		.1990				
40.1448	1.1125		.5380	.0780	.2990	.2720			.2480		.1260	.0990	.1170	.1050	.2790
99.1448	1.1125		.4850	.0010	.1750	.1440			.1350		.0520				
75.1448	1.1125		.3230	-.1140	.1200	.1680			.1470		-.0620	-.0780	-.0170	-.0020	-.0220
90.1448	1.1125	.7080	.0910	-.3420	.0490	.1740			.1610		-.1010	-.0520	-.0020	-.0170	-.0160
105.1448	1.1125														
110.1448	1.1125														
120.1448	1.1125		-.2290	-.4840	.0410	.2230			.3140		-.0520	-.0990	-.0430	-.0140	-.0170
135.1448	1.1125														
142.1448	1.1125									-.0170					
150.1448	1.1125		-.3990	-.0530	.0510	.0410			.0650		-.0190	-.0710	-.0150	-.0110	-.0130
157.1448	1.1125							.0390							
162.1448	1.1125								-.0720						
185.1448	1.1125										-.0780	-.0980	-.0430	-.0110	-.0140
189.1448	1.1125								-.2930						
172.1448	1.1125						.0330								
180.1448	1.1125	.1480	-.0390	-.0050	.0540	.5220			.0480		-1.0770	-.0380	-.0290	-.0060	-.0070

X/LB	.5073	.6828	.7580	.7980	.8203	.9048	.9282	.9659	1.0015	1.0392
PHI										
.1448	.2980							-.1960		-.1630
40.1448	.3290	.3280		.1880	.0630	-.1130	-.1040			-.1710
75.1448		-.0820	-.0980	-.4180	-.4250	-.6310	-.0920	-.1670		
90.1448		-.4120	-.0140	-.1610	-.3930	-.3830	-.6190	-.1710		
105.1448				.0510	-.2720	-.3090	-.0730	-.3490		
110.1448									-.2430	
120.1448		-.3040	-.0780	.0420	-.1850	-.4970	-.5170	-.4170	-.1490	
135.1448				.1980	-.1440	-.7380	-.4180	-.2540		
150.1448		-.8530	-.0650	-.0340	-.2580	-.5140	-.2990	-.2630		
165.1448		-.2650		.0310	-.1680	-.4210	-.2980	-.2440		
180.1448		-.2130	-.0080	-.0530						

AMES 11-7x7 OA12 CRA ORBITER FUSELAGE (RSP805)

MACH (2) = .904 BETA (3) = 5.220

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0440	.0675	.0100	.0339	.0482	.1355	.1506	.1581	.1732	.1950	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1190	1.0140	.0000	-.1420	.1980	.2130			.1930		.1430	.1110	.1300	.1630	.2380
20.000	1.1190		.3390	-.1440	.1670	.1930			.1810		.1170				
40.000	1.1190		.2400	-.2380	.0580	.0950			.0480		-.1810	-.1940	-.1430	-.0690	.1720
55.000	1.1190		.0940	-.4780	-.1120	-.0840			-.0790		-.1970				
70.000	1.1190		-.0790	-.6310	-.1970	.0290			-.0620		-.1780	-.7040	-.6320	-.2890	-.3240
90.000	1.1190	.4730	- 2830	.6800	-.0320	.0770			.0230		-.2680	- 8970	-.4410	-.1620	-.1650
100.000	1.1190														
110.000	1.1190														
120.000	1.1190		-.4970	-.6140	-.0480	.1630			.0490		-.5760	-.9510	-.3110	-.0850	-.0940
135.000	1.1190														
142.000	1.1190									-.0880					
150.000	1.1190		-.5540	-.6280	.0350	.3470			-.0420		-.6370	-.5720	-.3050	-.0630	-.0410
157.000	1.1190							.2430							
162.000	1.1190								-.2560						
165.000	1.1190										-.6110	-.9920	-.3990	.0350	-.0240
169.000	1.1190								-.2690						
172.000	1.1190						.5800								
180.000	1.1190	.1680	-.6430	-.6710	.0480	.5180			.0320		-1.0690	-.5110	-.3360	-.0510	-.0570

X/LB	.5073	.6026	.7380	.7869	.8283	.8849	.9282	.9639	1.0015	1.0392
PHI										
.000	.2810							-.2140		-.1640
40.000	.2330	.2880		.1720	.0830	-.0810	-.1900			-.2160
70.000		-.5310	-.7090	-.4060	-.4120	-.6340	-.7470	-.3080		
90.000		- 4430	-.5780	-.5550	-.5970	-.5870	-.6890	-.5620		
100.000				-.4430	-.5260	-.5800	-.6620	-.5960		
110.000									-.2380	
120.000		-.2780	-.1990	-.3010	-.5310	-.0830	-.6240	-.6040	-.1910	
135.000				.2370	-.1140	-.6370	-.5720	-.5220		
150.000		-.1940	-.0830	.2000	-.0510	-.5110	-.5160	-.4420		
165.000		-.1730		.1540	.0370	-.4280	-.4510	-.2960		
180.000		-.2420	-.1480	-.0450						

AMES 11-FT OA12 CRA ORBITER FUSELAGE (REPRO)

MACH (2) = .914 BETA (4) = 10.39

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0542	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3388	.3993	.5120
PHI															
.000	1.0790	.9840	.0000	-.1480	.1880	.1880			.1740		.1230	.1590	.1870	.1990	.2140
20.000	1.0790		.2580	-.1980	.1180	.1440			.1430		.0780				
40.000	1.0790		.1070	-.3630	-.4880	-.4670			-.1170		-.3940	-.3770	-.2740	-.1400	-.0980
90.000	1.0790		-.0790	-.6990	-.2880	-.1980			-.1570		-.2570				
70.000	1.0790		-.2840	-.6820	-.3470	-.1820			-.0590		-.2390	-.7150	-.6780	-.3370	-.3440
90.000	1.0790	.3110	-.4480	-.6540	-.2630	.1420			-.0330		- 3[illegible]	-.6660	-.3920	-.1720	-.2440
105.000	1.0790														
110.000	1.0790														
120.000	1.0790		-.6140	-.6140	-.2130	.1570			-.1490		-.4490	-.7880	-.2650	-.1410	-.1480
135.000	1.0790														
142.000	1.0790									-.7740					
150.000	1.0790		-.6360	-.6840	-.1460	.2780			-.1310		-.7190	-.6610	-.3690	-.1170	-.1630
157.000	1.0790							.1120							
162.000	1.0790								-.3680						
165.000	1.0790										-.5020	-.6210	-.3610	-.1170	-.1490
180.000	1.0790								-.2990						
172.000	1.0790						.4780								
180.000	1.0790	.1360	-.6610	-.7110	-.0460	.4340			-.1140		-.9490	-.8240	-.4710	-.1220	-.1180

X/LB	.3875	.6826	.7360	.7880	.8283	.8848	.9282	.9639	1.0015	1.0382
PHI										
.000	.2340							-.1450		-.1500
40.000	.1550	.2050		.1590	.0740	-.1030	-.1850			-.2400
70.000		-.5120	-.7080	-.4590	-.4870	-.6130	-.7420	-.3780		
90.000		-.4760	-.5400	-.5810	-.6440	-.5770	-.6490	-.5750		
105.000				-.4790	-.6310	-.6130	-.6510	-.5570		
110.000									-.2470	
120.000		-.2990	-.2430	-.2840	-.6050	-.6330	-.6830	-.6810	-.2130	
135.000				.3310	-.0480	-.6810	-.6240	-.5780		
150.000		-.2180	-.0830	.0840	-.1940	-.5050	-.3720	-.6930		
165.000		-.2050		.1430	-.0340	-.5440	-.5180	-.2750		
180.000		-.2340	-.1020	-.0720						

AMES 11-7D7 OA12 CRA ORBITER FUSELAGE (RBP806) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 20.530[illegible] INCHES
LREF = 39.049[illegible] INCHES YMRP = .000[illegible] INCHES
BREF = 39.049[illegible] INCHES ZMRP = .0000 INCHES
SCALE = .03[illegible] *SCALE

PARAMETRIC DATA

ALPHA = 20.000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

MACH (1) = .996 BETA (1) = -10.030

SECTION 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0100	.0330	.0640	.1000	.1500	.1901	.1732	.1950	.2230	.2711	.3240	.3955	.5125
PHI															
.000	.7830	.3410	.0440	.0060	.2490	.2470			.2320		.2100	.2120	.2300	.2420	.2740
20.000	.7830		.6200	.2230	.2980	.2910			.2820		.2450				
40.000	.7830		.7140	.3440	.3820	.3550			.3320		.2550	.1970	.2670	.3070	.3680
55.000	.7830		.6160	.2580	.2460	.1240			.0990		.0440				
75.000	.7830		.4120	.0740	.0350	.1230			.0930		-.0440	-.3080	-.2720	-.2230	-.5230
90.000	.7830	.6580	.1870	-.1550	.0220	.0510			.0330		-.1680	-.6750	-.4380	-.3700	-.3350
105.000	.7830														
110.000	.7830														
125.000	.7830		-.3910	-.3820	-.1470	-.0180			.2220		-.7610	-.7370	-.5450	-.5170	-.4950
135.000	.7830														
142.000	.7830									-.6110					
150.000	.7830		-.6490	-.5330	-.1940	.1680			-.3400		-1.1810	-.5760	-.2720	-.2740	-.2860
157.000	.7830							.1030							
162.000	.7830								-.5400						
185.000	.7830										-.0650	-.3070	-.2580	-.2930	-.2910
189.000	.7830								-.6320						
172.000	.7830						.3150								
180.000	.7830	-.3080	-.9160	-.3560	-.1780	.2410			-.3870		-.6900	-.2920	-.9990	-.1730	-.1920

X/LB	.5875	.6626	.7380	.7880	.8283	.8840	.9282	.9839	1.0015	1.0392
PHI										
.000	.2850							-.0040		-.1120
40.000	.3910	.3710		.1080	.1010	-.0110	-.0130			-.1070
70.000		-.9880	-.7570	-.6150	-.3900	-.3370	-.2380	-.2140		
90.000		-.5830	-.5010	-.4330	-.3390	-.3080	-.2300	-.1970		
[illegible]				-.0080	-.2230	-.2810	-.2250	-.2040		
110.000									-.2880	
120.000		-.4170	-.1180	.3380	-.1070	-.2270	-.1350	-.1090	-.1360	
135.000				-.1810	-.4220	-.4780	-.3140	-.2990		
150.000		-.2840	-.1250	-.1660	-.4820	-.2300	-.1580	-.2380		
165.000		-.2770		-.1110	-.1330	-.1520	-.1130	-.2620		
180.000		-.2230	-.1740	-.1810						

\+ AMES 11-7U7 OA12 CEA ORBITER FUSELAGE (RBPBL6)

MACH (1) = .907 BETA (2) = -4.97U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0180	.0339	.0682	.1355	.1506	.1581	.1732	.1950	.2239	.2711	.3250	.3953	.5125
PHI															
.000	.8490	1.0080	.0000	.1390	.3010	.2820			.2680		.2400	.2370	.2540	.2710	.2990
25.000	.8490		.6110	.2260	.3150	.2990			.2860		.2520				
40.000	.8490		.5900	.2480	.3040	.2860			.2410		.1910	.1480	.1480	.2410	.3230
55.000	.8490		.4380	.0740	.1050	-.1430			-.1010		-.1070				
70.000	.8490		.2010	-.1250	-.1320	.0180			-.1070		-.1440	-.4970	-.3840	-.3500	-.6490
90.000	.8490	.5110	-.1330	-.3310	-.0730	-.0210			-.0380		-.2440	-.7300	-.4690	-.4030	-.3650
105.000	.8490														
110.000	.8490														
120.000	.8490		-.5300	-.4560	-.1460	-.0110			.1540		-.7620	-.6800	-.4560	-.4170	-.3880
135.000	.8490														
142.000	.8490									-.6520					
150.000	.8490		-.7040	-.5820	-.1350	.2140			-.3850		-1.1290	-.3280	-.2610	-.2320	-.2560
157.000	.8490							.1130							
162.000	.8490								-.5870						
165.000	.8490										-.5500	-.2570	-.2420	-.1670	-.2660
169.000	.8490								-.8130						
172.000	.8490						.3730								
180.000	.8490	-.3480	-.9050	-.3480	-.1090	.3190			-.3360		-.5740	-.1910	-.1990	-.1590	-.0940

X/LB	.5873	.8628	.7380	.7869	.8283	.8848	.9262	.9699	1.0015	1.0392
PHI										
.000	.3060							-.1430		-.1090
40.000	.3640	.3630		.2060	.1180	.1420	-.0110			-.1180
70.000		-.9350	-.7520	-.6150	-.3750	-.3220	-.2250	-.2010		
90.000		-.7225	-.6550	-.6240	-.4780	-.3530	-.2500	-.2070		
105.000				-.2500	-.3700	-.3200	-.2510	-.2360		
110.000									-.2920	
120.000		-.3500	-.0890	.1330	-.3190	-.3050	-.1920	-.1900	-.1910	
135.000				.0810	-.2990	-.3710	-.2450	-.2400		
150.000		-.2490	-.0900	-.0420	-.3170	-.2680	-.1980	-.2480		
165.000		-.2840		-.0740	-.0830	-.2790	-.2430	-.2710		
180.000		-.1490	-.0680	-.0990						

AMES 11-7X7 OA12 OA ORBITER FUSELAGE (RDPBL6)

MACH (1) = .597 BETA ( ) = 5.21

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0482	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3236	.3953	.5125
PHI															
.000	.8150	.9780	.0000	.1220	.2920	.2670			.2560		.2360	.2310	.2470	.2630	.3010
20.000	.8150		.4420	.1540	.2520	.2390			.2230		.1870				
40.000	.8150		.2530	-.0470	.0510	-.0150			-.0950		-.3610	-.4120	-.2070	-.0630	.1740
55.000	.8150		-.0630	-.3280	-.2370	-.3740			-.3190		-.3510				
70.000	.8150		-.2780	-.3980	-.3710	-.1490			-.1690		-.3000	-.6310	-.4630	-.4430	-.7320
90.000	.8150	.1710	-.5590	-.6830	-.1910	-.1140			-.1500		-.3400	-.7500	-.4390	-.3750	-.4480
105.000	.8150														
115.000	.8150														
125.000	.8150		-.7500	-.6680	-.1590	-.0210			-.0640		-.6410	-.4680	-.2650	-.2210	-.2390
135.000	.8150														
142.000	.8150									-.0990					
150.000	.8150		-.8210	-.4080	-.1080	.1790			-.4990		-.7140	-.2330	-.1320	-.1300	-.1740
157.000	.8150							-.0190							
162.000	.8150								-.0070						
165.000	.8150										-.5320	-.1980	-.1260	-.0710	-.1170
169.000	.8150								-.0480						
172.000	.8150						.3230								
180.000	.8150	-.3130	-.0780	-.3280	-.1570	.3160			-.3310		-.5680	-.1790	-.2050	-.1660	-.0920

X/LB	.5073	.6626	.7380	.7869	.8283	.8648	.9282	.9639	1.0015	1.0392
PHI										
.000	.3020							-.0160		-.1210
40.000	.2430	.2850		.2460	.1280	.0120	-.0190			-.1260
70.000		-.0440	-.0690	-.0420	-.0440	-.0530	-.0330	-.1530		
90.000		-.0230	-.0580	-.0320	-.0630	-.0430	-.0380	-.1960		
105.000				-.0740	-.0580	-.0390	-.0290	-.0610		
115.000									-.0450	
125.000		-.0640	-.0870	-.0780	-.0330	-.0980	-.0320	-.0890	-.0820	
135.000				.0870	-.0760	-.0410	-.0790	-.0470		
150.000		-.0980	-.0370	.0510	-.0790	-.0450	-.0270	-.0970		
165.000		-.0580		.0920	.0290	-.0080	-.0320	-.0670		
180.000		-.0510	-.0070	-.0510						

AMES 11-7U7 OA12 OEA ORBITER FUSELAGE (RBPB06)

MACH (1) = .999 BETA (4) = 10.360

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.8040	.9400	.0000	.0940	.2440	.2420			.2280		.1960	.2090	.2160	.2360	.2650
20.000	.8040		.3210	.0310	.1650	.1680			.1670		.1210				
40.000	.8040		.0660	-.2190	-.1150	-.2160			-.3160		-.6610	-.6840	-.4410	-.1560	.0650
55.000	.8040		-.2150	-.5200	-.4090	-.5450			-.4490		-.5430				
70.000	.8040		-.5290	-.6940	-.4840	-.2260			-.2370		-.3480	-.6750	-.5130	-.5120	-.7480
90.000	.8040	-.0370	-.7830	-.7750	-.2390	-.1540			-.1980		-.3730	-.7240	-.4050	-.3520	-.4570
105.000	.8040														
110.000	.8040														
120.000	.8040		-.9510	-.7210	-.1520	-.0610			-.1530		-.5930	-.4290	-.2290	-.2260	-.2980
135.000	.8040														
142.000	.8040									-.7260					
150.000	.8040		-.9030	-.4380	-.1400	.0950			-.5870		-.6270	-.2500	-.1110	-.1040	-.1580
157.000	.8040							-.1600							
162.000	.8040								-.9790						
165.000	.8040										-.5760	-.2250	-.1090	-.1080	-.1670
169.000	.8040								-.9110						
172.000	.8040						.2110								
180.000	.8040	-.3660	-.9120	-.3950	-.1740	.2250			-.4140		-.6650	-.2840	-.6240	-.2030	-.2480

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2810							-.0060		-.1200
40.000	.1560	.2210		.1840	.1230	.0060	-.0170			-.1440
70.000		-.8290	-.7280	-.6970	-.5050	-.3890	-.2430	-.1670		
90.000		-.8730	-.8590	-.9350	-.6830	-.4740	-.3130	-.2210		
105.000				-.8570	-.7520	-.4800	-.3560	-.2990		
110.000									-.3640	
120.000		-.5420	-.2450	-.5850	-1.2030	-.6400	-.4350	-.3450	-.3470	
135.000				.3010	-.2440	-.5210	-.3780	-.2990		
150.000		-.2470	-.1180	.0760	-.3270	-.5740	-.4600	-.3750		
165.000		-.2440		-.0140	-.0960	-.5810	-.4830	-.2810		
180.000		-.2330	-.1700	-.1800						

AMES 11-7D7 OA12 OBA ORBITER FUSELAGE (RBPBU6)

MACH (2) = .902 BETA (1) = -10.110

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0440	.0675	.0198	.0339	.0682	.1355	.1956	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9815	1.0750	.0000	.1140	.3140	.3040			.2840		.2520	.2340	.2480	.2670	.3200
25.000	.9815		.7170	.2500	.3420	.3430			.3340		.2820				
40.000	.9815		.7860	.3810	.4300	.4120			.3910		.2930	.2360	.2830	.3250	.4110
55.000	.9815		.7110	.3460	.3080	.2230			.2180		.1710				
75.000	.9815		.5370	.1390	.0930	.2250			.2210		.1480	-.4010	-.3020	-.2500	-.3660
90.000	.9815	.9230	.3370	.1070	.0780	.1750			.1970		.1400	-.5490	-.5390	-.4150	-.1910
105.000	.9815														
110.000	.9815														
120.000	.9815		-.2170	-.4190	-.0950	.1310			.4410		-.5910	-.9960	-.8240	-.2770	-.3390
135.000	.9815														
142.000	.9815									-.4550					
150.000	.9815		-.4830	-.7210	-.1280	.3690			.6680		-1.0700	-.7930	-.4650	-.3270	-.1910
157.000	.9815							.3810							
162.000	.9815								-.1890						
165.000	.9815										-.6100	-.6210	-.4470	-.1630	-.2460
169.000	.9815								-.3350						
172.000	.9911						.5210								
180.000	.9911	-.7580	-.7870	-.7580	-.1010	.3970			-.0810		-.9500	-.7880	-.3340	-.0850	-.0850

X/LB	.5973	.8625	.7380	.7959	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3390							-.1050		-.1570
40.000	.4480	.4380		.2520	.1430	-.0350	-.0850			-.2150
75.000		-.8170	-1.0780	-.6620	-.9490	-.8090	-.5260	-.4810		
90.000		-.4930	-.8440	-.4300	-.6670	-.6200	-.5330	-.3880		
105.000				.0450	-.4620	-.5460	-.5110	-.3750		
110.000									-.3870	
120.000		-.5180	-.2220	.4880	-.1280	-.4980	-.4480	-.1530	-.2290	
135.000				-.0460	-.3750	-.9670	-.4470	-.2520		
150.000		-.3180	-.1120	-.0910	-.4180	-.6060	-.2710	-.2180		
165.000		-.2990		-.0380	-.1250	-.4990	-.2670	-.3080		
180.000			-.1730	-.1150						

AMES 11-7U7 OA12 OBA ORBITER FUSELAGE (RBPB06)

MACH (2) = .900 BETA (2) = -5.020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0240	1.1170	.8660	.1410	.3440	.3310			.3120		.2760	.2570	.2650	.2890	.3470
20.000	1.0240		.6880	.2310	.3560	.3510			.3380		.2840				
40.000	1.0240		.6710	.2710	.3480	.3530			.3190		.1780	.1230	.1880	.2620	.3760
55.000	1.0240		.5420	.1120	.1480	.0590			.0800		.0510				
70.000	1.0240		.3340	-.0820	-.0840	.1240			.1280		.0150	-.5410	-.4030	-.3940	-.5810
90.000	1.0240	.6880	.0310	-.3590	-.0180	.1140			.1340		-.0930	-.7570	-.6450	-.2110	-.2310
105.000	1.0240														
110.000	1.0240														
120.000	1.0240		-.3770	-.6220	-.0790	.1550			.3470		-.6640	-.9990	-.4670	-.1990	-.1760
1[illegible].00	1.0240														
142.000	1.0240									-.5970					
150.000	1.0240		-.5780	-.6750	-.0380	.4160			.0110		-1.1020	-.6190	-.4890	-.2480	-.1570
157.000	1.0240							.4190							
162.000	1.0240								-.1160						
165.000	1.0240										-.7700	-.4560	-.4840	-.0760	-.1940
169.000	1.0240								-.3500						
172.000	1.0240						.5800								
180.000	1.0240	-.0430	-.7930	-.5720	-.0780	.4560			-.0290		-.9640	-.5490	-.2520	-.0360	-.0770

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3670							-.0970		-.1740
40.000	.4230	.4350		.2750	.1720	-.0480	-.0780			-.2460
70.000		-.8310	-.9920	-.6270	-.6490	-.6350	-.5230	-.4860		
90.000		-.6780	-.8890	-.6390	-.8230	-.6980	-.5250	-.3940		
105.000				-.1720	-.5340	-.6800	-.4560	-.3870		
110.000									-.3750	
120.000		-.3610	-.1120	.3210	-.2730	-.6810	-.4350	-.2270	-.3080	
135.000				.1810	-.2580	-.7990	-.6150	-.2150		
150.000		-.2720	-.0930	-.0190	-.2530	-.6700	-.4680	-.2580		
165.000		-.2920		.0120	-.0870	-.6680	-.4590	-.3080		
180.000		-.2980	-.1450	-.0720						

AMES 11-7U7 OA12 OEA ORBITER FUSELAGE (RBPBU6)

MACH (2) = .9U4 BETA (3) = 5.26U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

Y/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0330	1.1960	.0000	.1260	.3290	.3210			.3100		.2650	.2490	.2550	.2760	.3390
20.000	1.0330		.5360	.1170	.2860	.2910			.2790		.2270				
40.000	1.0330		.3810	-.0120	.1160	.0930			.0230		-.2240	-.2320	-.1100	.0370	.2270
55.000	1.0330		.1820	-.2990	-.2170	-.2460			-.1670		-.1650				
75.000	1.0330		-.0510	-.5070	-.2850	-.1220			-.0180		-.1460	-.6790	-.6430	-.3500	-.6660
90.000	1.0330	.4090	-.3150	.6850	-.1550	.0360			.0220		-.2440	-.8600	-.7780	-.1760	-.2860
105.000	1.0330														
110.000	1.0330														
120.000	1.0330		-.6130	-.6270	-.1500	.1520			.1030		-.6500	-1.0240	-.4660	-.1780	-.1510
135.000	1.0330														
142.000	1.0330									-.7670					
150.000	1.0330		-.7570	-.5570	-.1170	.2820			-.0830		-1.0050	-.6020	-.2180	.0070	-.0790
157.000	1.0330							.1900							
162.000	1.0330								-.2810						
165.000	1.0330										-.9900	-.5270	-.2890	.0300	-.0510
169.000	1.0330								-.3120						
172.000	1.0330						.4870								
180.000	1.0330	-.0180	-.7200	-.5790	-.0690	.4570			-.0320		-.9190	-.5760	-.2950	-.0500	-.0900

Y/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3650							-.1030		-.1770
40.000	.3250	.3550		.2740	.1840	.0110	-.0810			-.2510
70.000		-.6960	-.8840	-.6760	-.5960	-.4070	-.5110	-.4860		
90.000		-.7090	-.8760	-.8860	-1.0320	-.4570	-.4440	-.4520		
105.000				-.6040	-.7390	-.6580	-.4410	-.4940		
110.000									-.4080	
120.000		-.3610	-.2710	-.3680	-.5530	-.8430	-.3590	-.4310	-.4050	
135.000				.0940	-.1780	-.6360	-.5650	-.3540		
150.000		-.3250	-.1690	.2860	-.0920	-.5180	-.5170	-.4410		
165.000		-.2480		.1230	.0960	-.3410	-.3780	-.3100		
180.000		-.2810	-.1490	-.0640						

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBFBU6)

MACH (2) = .905 BETA (4) = 10.430

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5129
PHI															
.000	.9920	1.0665	.0000	.1150	.3060	.2980			.2850		.2430	.2360	.2370	.2590	.3140
20.000	.9920		.4480	.0610	.2290	.2380			.2320		.1840				
40.000	.9920		.2360	-.1500	-.0290	-.0910			-.1780		-.4730	-.5030	-.2860	-.0980	.1360
55.000	.9920		.0080	-.4920	-.3570	-.3910			-.2640		-.3780				
70.000	.9920		-.2390	-.6810	-.5230	-.0720			-.0740		-.2140	-.7060	-.7130	-.3600	-.6140
90.000	.9920	.2630	-.4920	-.6600	-.3170	.0290			-.0260		-.2950	-.8770	-.6760	-.1870	-.3530
105.000	.9920														
110.000	.9920														
120.000	.9920		-.6850	-.5730	-.3360	.1120			-.0120		-.5760	-.9820	-.3420	-.1320	-.1890
135.000	.9920														
142.000	.9920									-.8680					
150.000	.9920		-.7970	-.6620	-.1520	.2730			-.1400		-.7050	-.6320	-.3110	-.0200	-.0670
157.000	.9920							.1310							
162.000	.9920								-.3920						
165.000	.9920										-.6380	-.6470	-.3140	-.0020	-.0540
169.000	.9920								-.3520						
172.000	.9920						.4400								
180.000	.9920	-.0110	-.8120	-.7330	-.0820	.3890			-.0870		-.9260	-.7180	-.3660	-.1010	-.0840

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3400							-.0990		-.1610
40.000	.2220	.2830		.2490	.1740	.0060	-.0870			-.2450
70.000		-.6640	-.8900	-.6520	-.5350	-.3530	-.5780	-.3420		
90.000		-.7240	-.9080	-.9300	-.9950	-.3790	-.3860	-.4020		
105.000				-.7230	-.7840	-.6670	-.4450	-.4970		
110.000									-.4040	
120.000		-.4140	-.3830	-.4430	-.6460	-.8860	-.7500	-.3520	-.3600	
135.000				.3840	-.0130	-.6660	-.6430	-.4090		
150.000		-.2770	-.1650	.1960	-.1630	-.5790	-.5700	-.4750		
165.000		-.2890		.0480	-.0270	-.5140	-.5040	-.3090		
180.000		-.3120	-.1540	-.0990						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB07) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.530[illegible] INCHES
LREF = 39.849[illegible] INCHES YMRP = .000[illegible] INCHES
BREF = 39.849[illegible] INCHES ZMRP = .000[illegible] INCHES
SCALE = [illegible]

PARAMETRIC DATA

ALPHA = .000 RUDDER = -10.000
ELEVON = .000 RUDFLR = .000

MACH (1) = .800 BETA (1) = -7.980

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0802	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0320	.3640	.4440	-.7380	-.1430	-.0680			-.0720		-.0810	-.0740	-.0520	-.0360	-.0250
20.000	1.0320		-.3680	-.6580	-.2080	-.1000			-.1060		-.1110				
40.000	1.0320		-.0680	-.4340	-.1730	-.2430			-.2560		-.2840	-.2110	-.1410	-.0820	-.0380
55.000	1.0320		.1170	-.2120	.0350	.0590			.0440		-.0210				
70.000	1.0320		.2050	-.0850	.1130	.1210			.0750		-.0340	-.0890	-.0330	.0490	.0150
90.000	1.0320	.9250	.2510	-.0240	.1550	.1510			.0850		-.0560	-.0450	-.0	.0260	.0070
105.000	1.0320														
110.000	1.0320														
120.000	1.0320		.2530	.0690	.2420	.2480			.1320		-.1790	-.2490	-.0740	-.0240	-.0150
135.000	1.0320														
142.000	1.0320									-.2890					
150.000	1.0320		.1890	.1100	.2370	.4420			.0350		-.5210	-.1730	-.0910	-.0490	-.0320
157.500	1.0320							.4080							
162.[illegible]	[illegible]								-.0430						
165.000	1.0320										-.3750	-.1560	.0290	-.0330	-.0210
169.000	1.0320								-.2260						
172.000	1.0320						.5990								
180.000	1.0320	.5500	-.0380	.0320	.1350	.4680			.0760		-.5790	-.2350	-.2090	-.2150	-.1940

X/LB	[illegible]	.9626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0302
PHI										
.000	[illegible]							-.1150		-.1630
40.000	[illegible]	-.1200		-.1820	-.2170	-.2170	-.1470			-.1510
70.000		-.0790	-.0750	-.0210	.0940	.0310	.0260	-.0290		
90.000		-.0440	.0070	.0590	.0750	-.0150	-.0190	-.0590		
[illegible]				.1430	.0350	-.0230	-.0440	-.0850		
11[illegible]									-.1730	
120.000		-.0280	.1280	.3350	-.0760	-.0740	-.0320	-.0450	.1210	
135.000				.2850	-.0020	-.1260	-.0660	-.1050		
150.000		-.0150	.1040	.1170	-.1040	-.0620	-.0480	-.1430		
165.000		.0450		.1640	.1330	.0250	-.0360	-.1940		
180.000		-.1560	-.0830	-.0330						

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBPB07)

MACH (1) = .800 BETA (2) = -3.940

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0810	.3845	.0000	-.7120	-.1130	-.0450			-.0510		-.0660	-.0570	-.0360	-.0200	-.0140
25.000	1.0810		-.3680	-.6380	-.1500	-.0600			-.0660		-.0830				
40.000	1.0810		-.1490	-.4620	-.1280	-.1370			-.1480		-.1830	-.1420	-.0760	-.0420	-.0130
55.000	1.0810		-.0220	-.3090	-.0070	.0220			-.0030		-.0620				
70.000	1.0810		.0350	-.2220	.0200	.0580			.0110		-.0930	-.3450	-.0670	.0050	-.0110
90.000	1.0810	.6990	.0570	-.1700	.0760	.0670			.0030		-.1250	-.4000	-.0720	-.0050	-.0120
105.000	1.0810														
110.000	1.0810														
125.000	1.0810		.1140	-.0190	.1560	.1570			-.0070		-.2160	-.2670	-.0790	-.0260	-.0120
135.000	1.0810														
142.000	1.0810									-.3730					
150.000	1.0810		.1140	.0640	.2080	.3990			-.0590		-.4950	-.1790	-.0810	-.0420	-.0170
157.000	1.0810							.3250							
162.000	1.0810								-.1680						
165.000	1.0810										-.4130	-.1640	-.0800	-.0380	-.0210
169.000	1.0810								-.2470						
172.000	1.0810						.6220								
180.000	1.0810	.5720	-.0240	.0580	.1760	.5220			.1200		-.5340	-.1730	-.1470	-.0800	-.0480

X/LB	.5874	.6628	.7580	.7888	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0200							-.1180		-.1550
40.000	-.0200	-.0940		-.1550	-.1980	-.2050	-.1480			-.1500
70.000		-.1110	-.1240	-.0830	.0300	-.0170	-.0010	-.0480		
90.000		-.0680	-.0390	-.0160	-.0040	-.0610	-.0580	-.0780		
105.000				.0340	-.0550	-.0870	-.0820	-.1090		
110.000									-.1800	
125.000		-.0290	.1150	.1990	-.2170	-.1350	-.0720	-.0770	-.1440	
135.000				.3690	-.0030	-.1570	-.0680	-.1160		
150.000		-.0050	.1190	.1830	-.0420	-.1240	-.1020	-.1700		
165.000		.0010		.1840	.1380	-.0550	-.1140	-.1860		
180.000		-.0440	.0340	.0790						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RDPB07)

MACH (1) = .60 BETA (3) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0802	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.00	1.0860	.3980	.1000	-.7110	-.1040	-.0350			-.0480		-.0610	-.0500	-.0330	-.0140	-.0060
20.00	1.0860		-.4180	-.6310	-.1270	-.0430			-.0490		-.0740				
40.00	1.0860		-.2710	-.4980	-.1160	-.0790			-.0870		-.1400	-.1070	-.0450	-.0150	.0030
55.00	1.0860		-.1800	-.4060	-.0490	-.0070			-.0360		-.0990				
70.00	1.0860		-.1440	-.3400	-.0470	.0010			-.0460		-.1430	-.3810	-.0920	-.0100	-.0250
90.00	1.0860	.5540	-.1260	-.3050	-.0090	-.0060			-.0720		-.1740	-.4290	-.0930	-.0190	-.0180
105.00	1.0860														
110.00	1.0860														
125.00	1.0860		-.0340	-.1340	.0690	.0600			-.1440		-.2490	-.2730	-.0830	-.0260	-.0120
135.00	1.0860														
142.00	1.0860									-.4480					
150.00	1.0860		.0390	.0080	.1590	.3270			-.1610		-.4550	-.1780	-.0760	-.0330	-.0100
157.00	1.0860							.2070							
162.00	1.0860								-.2900						
165.00	1.0860										-.4350	-.1530	-.0790	-.0330	-.0190
169.00	1.0860								-.2710						
172.00	1.0850						.6040								
180.00	1.0850	.5890	-.1010	.0680	.1950	.5420			.1350		-.5110	-.1480	-.1010	-.0400	-.0140

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.00	-.0150							-.1150		-.1550
40.00	.0010	-.0680		-.1350	-.1750	-.1980	-.1480			-.1540
70.00		-.1300	-.1610	-.1380	-.0300	-.0640	-.0430	-.0690		
90.00		-.0870	-.0760	-.0890	-.0820	-.1070	-.0880	-.0950		
105.00				-.0760	-.1490	-.1330	-.1180	-.1310		
110.00									-.2080	
120.00		-.0310	.0680	.0280	-.3750	-.2010	-.1150	-.1070	-.1650	
135.00				.4090	-.0530	-.2270	-.1430	-.1490		
150.00		.0010	.1240	.2480	.0110	-.1950	-.1720	-.2000		
165.00		.0090		.2070	.1390	-.1530	-.1900	-.1770		
180.00		.0080	.0870	.1180						

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBPD07)

MACH (1) = .599 BETA (4) = 4.210

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.0540	.3750	.0400	-.7140	-.1120	-.0420			-.0450		-.0650	-.0510	-.0360	-.0170	-.0120
20.000	1.0540		-.4680	-.6520	-.1130	-.0430			-.0410		-.0730				
40.000	1.0540		-.3830	-.5480	-.1140	-.0540			-.0590		-.1260	-.1010	-.0420	-.0180	.0050
55.000	1.0540		-.3430	-.5100	-.0880	-.0410			-.0700		-.1280				
70.000	1.0540		-.3220	-.4640	-.1040	-.0490			-.0930		-.1820	-.3990	-.1070	-.0240	-.0310
90.000	1.0540	.4000	-.3190	-.4370	-.0810	-.0700			-.1340		-.2100	-.4340	-.1060	-.0270	-.0220
105.000	1.0540														
110.000	1.0540														
120.000	1.0540		-.1910	-.2590	-.0310	-.0490			-.2850		-.2760	-.2830	-.0880	-.0340	-.0190
135.000	1.0540														
142.000	1.0540									-.5880					
150.000	1.0540		-.0470	-.0700	.0860	.2190			-.2720		-.4370	-.1880	-.0890	-.0420	-.0130
157.000	1.0540							.0480							
162.000	1.0540								-.4350						
165.000	1.0540										-.4280	-.1540	-.0890	-.0480	-.0410
169.000	1.0540								-.3280						
172.000	1.0540						.5480								
180.000	1.0540	.5770	-.0020	.0550	.1810	.5190			.1160		-.5260	-.1630	-.1230	-.0620	-.0340

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0200							-.1170		-.1570
40.000	.0080	-.0530		-.1180	-.1610	-.1820	-.1480			-.1530
70.000		-.1470	-.1940	-.1880	-.0860	-.1030	-.0750	-.0910		
90.000		-.0970	-.1130	-.1560	-.1450	-.1430	-.1190	-.1230		
105.000				-.1700	-.2270	-.1810	-.1480	-.1530		
110.000									-.2240	
120.000		-.0450	.0320	-.1500	-.5440	-.2660	-.1630	-.1390	-.1910	
135.000				.4010	-.1490	-.3460	-.2260	-.1960		
150.000		-.0100	.1030	.3070	.0360	-.2840	-.2350	-.2320		
165.000		-.0250		.2010	.1320	-.2940	-.2515	-.1890		
180.000		-.0210	.0530	.0980						

AMES 11-7D7 OA12 O2A ORBITER FUSELAGE (RBPB07)

MACH (1) = .597 BETA (5) = 8.32D

SECTION ' 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0440	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0150	.3630	.0000	-.7320	-.1300	-.0610			-.0660		-.0780	-.0700	-.0480	-.0370	-.0250
25.000	1.0150		-.5370	-.6790	-.1250	-.0540			-.0500		-.0820				
40.000	1.0150		-.5070	-.6070	-.1290	-.0530			-.0690		-.1440	-.1240	-.0680	-.0350	-.0240
55.000	1.0150		-.5050	-.6240	-.1340	-.0740			-.1030		-.1510				
70.000	1.0150		-.5170	-.6020	-.1540	-.0860			-.1310		-.2020	-.4060	-.1140	-.0270	-.0340
90.000	1.0150	.2260	-.5170	-.5630	-.1510	-.1370			-.1930		-.2520	-.4240	-.1020	-.0330	-.0250
105.000	1.0150														
110.000	1.0150														
120.000	1.0150		-.3620	-.3860	-.1370	-.1540			-.4260		-.3010	-.2950	-.1080	-.0490	-.0280
135.000	1.0150														
142.000	1.0150									-.8570					
150.000	1.0150		-.1590	-.1640	-.0130	.0900			-.3860		-.4400	-.2080	-.1160	-.0610	-.0250
157.000	1.0150							-.1430							
162.000	1.0150								-.6150						
165.000	1.0150										-.4950	-.1780	-.1130	-.1160	-.1010
169.000	1.0150								-.4010						
172.000	1.0150						.4480								
180.000	1.0150	.5610	-.0300	.0220	.1360	.4560			.0640		-.5710	-.2170	-.1730	-.1720	-.1610

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0330							-.1170		-.1610
40.000	.0010	-.0480		-.1070	-.1420	-.1790	-.1450			-.1620
70.000		-.1590	-.2210	-.2320	-.1240	-.1400	-.0960	-.1140		
90.000		-.1090	-.1470	-.2150	-.1900	-.1830	-.1490	-.1380		
105.000				-.2510	-.2920	-.2300	-.1840	-.1750		
110.000									-.2340	
120.000		-.0720	-.0040	-.2910	-.7080	-.3330	-.2090	-.1870	-.2210	
135.000				.3870	-.2420	-.4860	-.3240	-.2690		
150.000		-.0650	.0250	.1970	.0050	-.3770	-.3190	-.2750		
165.000		-.0890		.1440	.0610	-.4650	-.3810	-.2020		
180.000		-.1460	-.0820	-.0370						

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBP807)

MACH (2) = .902 BETA (1) = -8.090

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1480	.5780	.0000	-.7310	-.2830	-.0440			-.0820		-.1480	-.1800	-.0750	-.0290	.0070
20.000	1.1480		-.1090	-.6020	-.2320	-.0680			-.1100		-.1820				
40.000	1.1480		.1220	-.5660	-.2100	-.2490			-.2910		-.3770	-.4330	-.1470	-.0770	-.0060
55.000	1.1480		.2260	-.2780	.0350	.0870			.0280		-.0330				
70.000	1.1480		.3140	-.1550	.1210	.1710			.1010		-.0320	-.6250	.0060	.0580	.0550
90.000	1.1480	.9420	.3340	-.0460	.1900	.2130			.1160		-.0510	-.7420	.0050	.0430	.0420
105.000	1.1480														
110.000	1.1480														
125.000	1.1480		.3240	.0980	.2940	.3460			.1910		-.1440	-.8050	-.0170	.0050	.0190
135.000	1.1480														
142.000	1.1480									-.4530					
150.000	1.1480		.2420	.1180	.2810	.5690			.2610		-.5760	-.5920	-.0330	-.0140	.0030
157.000	1.1480							.5770							
162.000	1.1480								.1510						
165.000	1.1480										-.5350	-.5040	.3340	.0460	.0170
180.000	1.1480								-.0150						
172.000	1.1480						.7830								
180.000	1.1480	.7140	.0120	.0440	.1810	.6170			.2850		-1.1070	-.5030	-.2120	-.1250	-.1420

X/LB	.5873	.6826	.7580	.7889	.8283	.8648	.9262	.9639	1.0015	1.0392
PHI										
.000	.0410							-.1130		-.1510
40.000	-.1420	-.1070		-.1870	-.2830	-.4290	-.2130			-.1520
70.000		-.0550	-.1220	-.0570	.0630	.0150	.0620	.0170		
90.000		-.0330	-.0220	.0480	.0220	-.0370	.0210	.0070		
105.000				.1400	-.0280	-.0620	.0000	-.0240		
110.000									-.2050	
125.000		-.0290	.1380	.3650	-.1530	-.1010	.0160	-.0010	-.1370	
135.000				.3600	.0330	-.1030	.0070	-.0480		
150.000		-.0080	.1500	.1770	-.0690	-.0300	.0300	-.1110		
165.000		.0160		.2140	.1620	.0540	.0400	-.2320		
180.000		-.0950	.0310	.0750						

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AMES 11-7D7 OA12 OEA ORBITER FUSELAGE (RBPB07)

MACH (2) = .901 BETA (2) = -4.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2110	.5900	.0000	-.6340	-.3280	-.0170			-.0590		-.1240	-.1350	-.0550	-.0490	.0290
20.000	1.2110		-.1310	-.6860	-.1940	-.0440			-.0720		-.1430				
40.000	1.2100		.0390	-.6890	-.1380	-.1300			-.1760		-.2650	-.3270	-.0790	-.0210	.0260
55.000	1.2110		.1270	-.5030	.0090	.0590			.0010		-.0640				
70.000	1.2110		.1990	-.3340	.0520	.1100			.0210		-.1000	-.0690	-.0240	.0400	.0290
90.000	1.2110	.8290	.1560	-.2400	.1090	.1350			.0240		-.1250	-.7860	-.0290	.0290	.0240
105.000	1.2110														
110.000	1.2100														
120.000	1.2110		.1780	-.0460	.1990	.2660			.0610		-.1910	-.8400	-.0690	.0110	.0290
135.000	1.2110									-.7800					
142.000	1.2110								.2070		-.5750	-.5780	-.0250	.0480	.0170
150.000	1.2110		.1650	.0530	.2540	.5330		.5120							
157.000	1.2110								.0950						
162.000	1.2100										-.8300	-.4390	-.0140	.0130	.0130
165.000	1.2110								-.1050						
169.000	1.2110						.7870								
172.000	1.2100								.3140		-1.1880	-.3290	-.1550	-.0180	-.0070
180.000	1.2110	.8980	.0490	.0570	.2250	.6680									

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI								-.0940		-.1370
.000	.0240									-.1440
40.000	.0320	-.0660		-.1580	-.2520	-.3820	-.2750			
75.000		-.0840	-.1500	-.1380	-.0440	-.0660	.0140	-.0100		
90.000		-.0500	-.0480	-.0350	-.1070	-.1350	-.0290	-.0270		
105.000				.0390	-.1740	-.1570	-.0530	-.0560		
110.000									-.2120	
120.000		-.0230	.1280	.2270	-.3330	-.2000	-.0430	-.0450	-.1520	
135.000				.4120	.0170	-.1880	-.0580	-.0880		
150.000		.0060	.1520	.2450	-.0030	-.1440	-.0650	-.1600		
165.000		.0130		.2330	.1640	-.0770	-.0690	-.2200		
180.000		-.0290	.0830	.1390						

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBPB07)

MACH (2) = .903 BETA (3) = .090

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1900	.6050	.0000	-.6050	-.3410	-.0090			-.0540		-.1190	-.1230	-.0510	-.0030	.0280
25.000	1.1900		-.1730	-.6880	-.2380	-.0240			-.0560		-.1350				
45.000	1.1900		-.0530	-.7640	-.0930	-.0670			-.1130		-.2120	-.2560	-.0460	.0010	.0370
55.000	1.1900		-.0080	-.6970	-.0060	.0250			-.0480		-.1500				
70.000	1.1900		.0040	-.5970	.0080	.0510			-.0470		-.2000	-.6910	-.0570	.0260	.0110
90.000	1.1900	.7060	-.0060	-.5010	.0390	.0640			-.0600		-.2390	-.7980	-.0770	.0210	.0140
105.000	1.1900														
110.000	1.1900														
125.000	1.1900		.0390	-.2050	.1110	.1760			-.0720		-.3760	-.8170	-.0660	.0190	.0230
135.000	1.1900									-1.0640					
142.000	1.1900														
150.000	1.1900		.0840	-.0230	.2040	.4720			.1420		-.7570	-.4770	-.0270	.0110	.0260
157.000	1.1900							.4070							
162.000	1.1900								.0070						
165.000	1.1900										-.8780	-.4580	-.0150	.0280	.0150
169.000	1.1900								-.0100						
172.000	1.1900						.7710								
180.000	1.1900	.7050	.0190	.0670	.2430	.6830			.3230		-1.1670	-.3320	-.0130	.0060	.0180

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0260							-.0070		-.1350
40.000	.0490	-.0310		-.1410	-.2320	-.3580	-.3140			-.1490
70.000		-.0930	-.1570	-.1850	-.1440	-.3260	-.0600	-.0420		
90.000		-.0530	-.0560	-.1050	-.2210	-.4150	-.1060	-.0540		
105.000				-.0630	-.2980	-.4440	-.1130	-.0850		
110.000									-.2160	
120.000		-.0130	.1160	.0770	-.4660	-.4850	-.1060	-.0910	-.1830	
135.000				.4410	-.0130	-.5010	-.1830	-.1480		
150.000		.0110	.1520	.3020	.0530	-.3610	-.1980	-.2100		
165.000		.0140		.2540	.1630	-.2590	-.2050	-.2110		
180.000		.0140	.1150	.1680						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBPBU7)

MACH (2) = .902 BETA (4) = 4.260

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1950	.6040	.0000	-.6300	-.3640	-.0190			-.0580		-.1340	-.1280	-.0580	-.0070	.0210
20.000	1.1950		-.2190	-.6910	-.3060	-.0190			-.0530		-.1450				
40.000	1.1950		-.1520	-.7620	-.0680	-.0330			-.0780		-.2260	-.2170	-.0530	.0000	.0360
55.000	1.1950		-.1410	-.8240	.0070	-.0060			-.0810		-.2500				
75.000	1.1950		-.1470	-.7490	.0220	.0050			-.0970		-.3490	-.7150	-.0670	.0150	.0030
90.000	1.1950	.5710	-.1640	-.6980	-.0110	.0000			-.1320		-.4140	-.8190	-.0750	.0140	.0130
105.000	1.1950														
110.000	1.1950								-.2050		-.5600	-.7250	-.0530	.0060	.0160
120.000	1.1950		-.1000	-.4090	.0150	.0750									
135.000	1.1950									-1.1650					
142.000	1.1950								.0540		-.7110	-.4630	-.0690	.0210	.0190
150.000	1.1950		.0050	-.1150	.1330	.3780		.2700							
157.000	1.1950								-.1050						
162.000	1.1950										-.8870	-.5010	-.0450	.0160	-.0080
165.000	1.1950								-.0380						
169.000	1.1950						.7170								
172.000	1.1950								.3050		-1.1600	-.4340	-.0770	-.0230	-.0420
180.000	1.1950	.6880	.0260	.0530	.2290	.6640									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI								-.0980		-.1410
.000	.0190									-.1560
40.000	.0540	-.0170		-.1360	-.2210	-.3450	-.3090			
75.000		-.0900	-.1540	-.2240	-.2080	-.4730	-.2140	-.0840		
90.000		-.0480	-.0650	-.1620	-.2890	-.4920	-.3360	-.0970		
105.000				-.1380	-.3870	-.5020	-.3720	-.1260		
110.000									-.2320	
120.000		-.0150	.0690	-.0640	-.5810	-.5630	-.4820	-.1230	-.1950	
135.000				.4440	-.0480	-.6550	-.4690	-.2190		
150.000		.0060	.1280	.2970	.0650	-.4240	-.4420	-.3030		
165.000		-.0070		.2440	.1720	-.3790	-.3900	-.2150		
180.000		-.0170	.0860	.1390						

AMES 11-7X7 OA12 OPA ORBITER FUSELAGE (RBFB07)

MACH (2) = .9.9 BETA (5) = 8.44U

SECTION / 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0333	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5125
PHI															
.000	1.1630	.5830	.0000	-.7110	-.3340	-.0340			-.0750		-.1570	-.1510	-.0770	-.0260	.0040
25.000	1.1630		-.2680	-.7060	-.3480	-.0210			-.0570		-.1700				
40.000	1.1630		-.2550	-.7030	-.2790	-.0220			-.0770		-.2550	-.2640	-.0830	-.0190	.0230
55.000	1.1630		-.2690	-.7070	-.2460	-.0260			-.1070		-.3050				
70.000	1.1630		-.2960	-.7060	-.2240	-.0230			-.1360		-.4290	-.7750	-.0910	.0150	.0020
90.000	1.1630	.4300	-.3050	-.6950	-.1230	-.0510			-.1920		-.5110	-.7690	-.1010	.0260	.0170
105.000	1.1630														
110.000	1.1630														
120.000	1.1630		-.2240	-.5850	-.1110	-.0340			-.3320		-.6800	-.5990	-.1250	.0150	.0130
135.000	1.1630														
142.000	1.1630									-1.2340					
150.000	1.1630		-.0750	-.2190	.0270	.2600			-.0490		-.7520	-.5600	-.1860	.0230	-.0240
157.000	1.1630							.1130							
162.000	1.1630								-.2130						
165.000	1.1630										-.8010	-.6020	-.1960	-.0480	-.0620
169.000	1.1630								-.0690						
172.000	1.1630						.6250								
180.000	1.1630	.6950	.0170	.0250	.1850	.6010			.2670		-.9690	-.6010	-.1740	-.1070	-.1160

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0020							-.1180		-.1580
40.000	.0380	-.0170		-.1250	-.2070	-.3230	-.3460			-.1830
70.000		-.0840	-.1490	-.2380	-.2310	-.5170	-.3770	-.1250		
90.000		-.0460	-.0710	-.1860	-.3270	-.5280	-.5560	-.1470		
105.000				-.1710	-.4600	-.5410	-.5730	-.2100		
110.000									-.2390	
120.000		-.0200	.0730	-.1070	-.6440	-.6180	-.5650	-.3480	-.2100	
135.000				.4800	-.0280	-.7560	-.6920	-.5600		
150.000		-.0660	.0430	.1490	.0130	-.4430	-.5520	-.4420		
165.000		-.0700		.1710	.1270	-.4590	-.5050	-.2540		
180.000		-.0870	.0290	.0840						

AMES 11-7D7 OA12 O2A ORBITER FUSELAGE (RBPBU8) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .03[illegible] SCALE

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = -10.000
ELEVON = .000 RUDFLR = .000

MACH (1) = .600 BETA (1) = -8.040

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0375	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	1.0440	.5555	.0000	-.5140	-.0560	-.0030			-.0130		-.0290	-.0260	-.0050	.0120	.0300
20.000	1.0440		-.0830	-.4320	-.0840	-.0130			-.0180		-.0400				
40.000	1.0440		.1530	-.2230	-.0050	-.0470			-.0500		-.0880	-.0550	-.0030	.0260	.0640
55.000	1.0440		.2630	-.0760	.1270	.1410			.1110		.0280				
70.000	1.0440		.2800	-.0200	.1450	.1550			.1030		-.0240	-.3050	-.0680	-.0130	-.0650
90.000	1.0440	.8180	.2260	-.0270	.1770	.1650			.1020		-.0640	-.3990	-.0960	-.0440	-.0780
105.000	1.0440														
110.000	1.0440														
120.000	1.0440		.1197	-.0040	.1770	.2210			.1690		-.2780	-.3270	-.1440	-.1080	-.1150
135.000	1.0440														
142.000	1.0440									-.3700					
150.000	1.0440		-.0180	-.0350	.1290	.3800			-.0660		-.6580	-.2260	-.1300	-.0930	-.0850
157.000	1.0440							.3300							
162.000	1.0440								-.2170						
165.000	.0440										-.4270	-.1850	-.1230	-.0720	-.0690
169.000	1.0440								-.3910						
172.000	1.0440						.5330								
180.000	1.0440	.3510	-.2620	-.1080	.0420	.4180			-.0400		-.6150	-.2490	-.2210	-.3360	-.1850

X/LB	.6673	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0340							-.0970		-.1430
40.000	.0650	.0100		-.0820	-.1410	-.1630	-.1150			-.1410
70.000		-.2050	-.1500	-.0500	.0970	.0410	.0400	-.0080		
90.000		-.1570	-.0640	.0490	.0790	-.0070	-.0130	-.0460		
[illegible]				.1470	.0470	-.0220	-.0360	-.0740		
110.000									-.1620	
120.000		-.1350	.0620	.3630	-.0590	-.0950	-.0450	-.0500	-.1200	
135.000				.1660	-.1010	-.1900	-.1160	-.1410		
150.000		-.0760	.0390	.0250	-.2050	-.1100	-.0700	-.1450		
165.000		-.0560		.0791	.0640	-.0220	-.0620	-.1870		
180.000		-.1470	-.0790	-.0670						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB08)

MACH (1) = .999 BETA (2) = -3.970

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0360	.6030	.0000	-.4900	-.0300	.0130			.0030		-.0140	-.0130	.0050	.0230	.0470
20.000	1.0360		-.0930	-.4270	-.0480	.0070			.0020		-.0240				
40.000	1.0360		.0360	-.2780	.0050	.0075			-.0090		-.0600	-.0460	.0100	.0390	.0680
55.000	1.0360		.1190	-.1870	.0690	.0790			.0480		-.0320				
70.000	1.0360		.1060	-.1590	.0380	.0800			.0320		-.0840	-.3690	-.1140	-.0490	-.0920
90.000	1.0360	.6960	.0360	-.1740	.0870	.0880			.0250		-.1310	-.4480	-.1250	-.0650	-.0890
105.000	1.0360														
110.000	1.0360														
120.000	1.0360		-.0190	-.1040	.1150	.1530			.0490		-.3110	-.3270	-.1370	-.0900	-.0910
135.000	1.0360														
142.000	1.0360									-.4500					
150.000	1.0360		-.0820	-.0790	.1170	.3500			-.1480		-.6270	-.2280	-.1190	-.0740	-.0650
157.000	1.0360							.2680							
162.000	1.0360								-.2970						
165.000	1.0360										-.4660	-.1940	-.1120	-.0670	-.0650
169.000	1.0360								-.4020						
172.000	1.0360						.5570								
180.000	1.0360	.3700	-.2470	-.0920	.0800	.4680			-.0110		-.5820	-.1890	-.1610	-.1090	-.1130

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0430							-.0940		-.1460
40.000	.0740	.0300		-.0660	-.1220	-.1620	-.1160			-.1430
70.000		-.2450	-.2080	-.1230	.0260	-.0210	-.0050	-.0390		
90.000		-.1840	-.1110	-.0380	-.0050	-.0720	-.0580	-.0750		
105.000				.0390	-.0480	-.0930	-.0810	-.1050		
110.000									-.1770	
120.000		-.1230	.0570	.2430	-.1900	-.1500	-.0810	-.0790	-.1400	
135.000				.2670	-.0850	-.1970	-.1170	-.1410		
150.000		-.0640	.0610	.0960	-.1360	-.1650	-.1230	-.1760		
165.000		-.0620		.1010	.0730	-.0980	-.1340	-.1770		
180.000		-.0820	.0050	.0430						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7D7 OA12 O2A ORBITER FUSELAGE (RBPBL0)

MACH (1) = .800 BETA (3) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0950	.5990	.0000	-.4870	-.0300	.0200			.0110		-.0130	-.0070	.0110	.0280	.0520
25.000	1.0950		-.1510	-.4340	-.0340	.0250			.0110		-.0210				
40.000	1.0950		-.0570	-.3350	-.0140	.0190			.0060		-.0690	-.0590	-.0050	.0270	.0640
55.000	1.0950		-.0400	-.3100	.0040	.0240			-.0080		-.0840				
70.000	1.0950		-.0750	-.2950	-.0320	.0280			-.0270		-.1350	-.4060	-.1400	-.0670	-.1120
90.000	1.0950	.5570	-.1470	-.2970	.0120	.0250			-.0420		-.1790	-.4790	-.1310	-.0710	-.0940
105.000	1.0950														
110.000	1.0950														
120.000	1.0950		-.1610	-.2020	.0490	.0840			-.0720		-.3300	-.3220	-.1220	-.0720	-.0670
135.000	1.0950									-.5060					
142.000	1.0950								-.2270		-.5650	-.2030	-.1030	-.0570	-.0470
150.000	1.0950		-.1480	-.1210	.0880	.3010		.1730							
157.000	1.0950								-.4010						
162.000	1.0950										-.4830	-.1830	-.1160	-.0530	-.0500
165.000	1.0950								-.4320						
169.000	1.0950						.5470								
172.000	1.0950								.0150		- .5540	-.1640	-.1110	-.0600	-.0480
180.000	1.0950	.3960	-.2270	-.0750	.1030	.4895									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0520							-.0940		-.1470
40.000	.0740	.0340		-.0590	-.1070	-.1560	-.1230			-.1430
75.000		-.2640	-.2460	-.1840	-.0350	-.0710	-.0420	-.0660		
90.000		-.1900	-.1400	-.1120	-.0970	-.1180	-.0910	-.0990		
105.000				-.0860	-.1360	-.1430	-.1220	-.1310		
110.000									-.1980	
120.000		-.1060	.0410	.0660	-.3230	-.2080	-.1150	-.1080	-.1590	
135.000				.3220	-.0940	-.2390	-.1460	-.1530		
150.000		-.0520	.0730	.1790	-.0600	-.2230	-.1860	-.2010		
165.000		-.0430		.1450	.0690	-.1840	-.1960	-.1750		
180.000		-.0390	.0390	.0470						

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBPB08)

MACH (1) = .601 BETA (4) = 4.180

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5125
PHI															
.000	1.0450	.5890	.0000	-.4950	-.0320	.0140			.0070		-.0200	-.0160	.0060	.0260	.0440
25.000	1.0450		-.2060	-.4570	-.0370	.0130			.0060		-.0280				
40.000	1.0450		-.1810	-.4040	-.0420	.0070			-.0160		-.1080	-.1050	-.0440	-.0030	.0410
55.000	1.0450		-.2020	-.4230	-.0590	-.0330			-.0660		-.1270				
70.000	1.0450		-.2620	-.4160	-.1030	-.0290			-.0750		-.1750	-.4310	-.1540	-.0880	-.1130
90.000	1.0450	.4010	-.3380	-.4270	-.0600	-.0360			-.1040		-.2170	4830	-.1350	-.0740	-.0860
105.000	1.0450														
115.000	1.0450														
120.000	1.0450		-.3220	-.3120	-.0290	-.0060			-.1960		-.3440	-.3190	1090	-.0610	-.0530
135.000	1.0450														
142.000	1.0450									-.6100					
150.000	1.0450		-.2410	-.1890	.0320	.2150			-.3260		-.5250	-.2040	-.0980	-.0540	-.0440
157.000	1.0450							.0340							
162.000	1.0450								-.5430						
165.000	1.0450										-.4890	-.1730	-.1010	-.0540	-.0580
169.000	1.0450								-.4790						
172.000	1.0450						.4930								
180.000	1.0450	.3940	-.2270	-.0830	.0870	.4650			-.0690		-.5700	-.1850	-.1370	-.0870	-.1080

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0460							-.0980		-.1460
40.000	.0670	.0340		-.0460	-.0960	-.1490	-.1250			-.1510
70.000		-.2790	-.2790	-.2350	-.1110	-.1220	-.0840	-.0970		
90.000		-.2020	-.1740	-.2030	-.1760	-.1690	-.1300	-.1300		
105.000				-.1910	-.2250	-.1890	-.1540	-.1620		
115.000									-.2230	
120.000		-.1080	.0040	-.1270	-.4900	-.2620	-.1580	-.1370	-.1900	
135.000				.3650	-.1540	-.3280	-.2070	-.1830		
150.000		-.0570	.0630	.2210	-.0350	-.3150	-.2440	-.2350		
165.000		-.0550		.1540	.0710	-.3070	-.2620	-.1610		
180.000		-.0760	.0110	.0430						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBPBU0)

MACH (1) = .801 BETA (5) = 8.260

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0490	.5460	.0000	-.5170	-.0580	-.0030			-.0070		-.0320	-.0220	-.0070	.0110	.0310
20.000	1.0490		-.2880	-.4830	-.0620	-.0080			-.0090		-.0490				
40.000	1.0490		-.3190	-.4750	-.0910	-.0320			-.0560		-.1840	-.1720	-.1080	-.0430	.0140
55.000	1.0490		-.3770	-.5350	-.1200	-.0870			-.1130		-.1680				
70.000	1.0490		-.4460	-.5570	-.1580	-.0760			-.1180		-.2080	-.4390	-.1670	-.0920	-.1140
90.000	1.0490	.2310	-.5240	-.5650	-.1070	-.0890			-.1510		-.2390	-.4750	-.1350	-.0700	-.0840
105.000	1.0490														
110.000	1.0490														
120.000	1.0490		-.4590	-.4350	-.1010	-.0900			-.3180		-.3430	-.3000	-.0990	-.0530	-.0540
135.000	1.0490									-.0990					
142.000	1.0490														
150.000	1.0490		-.3280	-.2730	-.0450	.1160			-.4300		-.4750	-.2100	-.1060	-.0670	-.0560
157.000	1.0490							-.1350							
162.000	1.0490								-.7030						
165.000	1.0490										-.5000	-.1900	-.1050	-.0940	-.0910
169.000	1.0490								-.5400						
172.000	1.0490						.4020								
180.000	1.0490	.3630	-.2500	-.1170	.0460	.4020			-.0670		-.6170	-.2390	-.1900	-.2950	-.1660

X/LB	.5873	.6628	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0300							-.0980		-.1590
40.000	.0420	.0240		-.0360	-.0870	-.1380	-.1250			-.1620
70.000		-.2830	-.3110	-.2850	-.1640	-.1550	-.1110	-.1070		
90.000		-.2100	-.2190	-.2560	-.2240	-.2040	-.1620	-.1390		
105.000				-.2670	-.3050	-.2380	-.1910	-.1750		
110.000									-.2400	
120.000		-.1270	-.0330	-.2200	-.6470	-.3310	-.2070	-.1730	-.2110	
135.000				.3670	-.2170	-.4330	-.2870	-.2350		
150.000		-.0830	.0120	.1890	-.1040	-.4260	-.3470	-.2880		
165.000		-.1280		.1130	.0680	-.5180	-.4050	-.2140		
180.000		-.1540	-.0810	-.0630						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 OPA ORBITER FUSELAGE (RBPB00)

MACH (2) = .900 BETA (1) = -8.140

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1610	.7220	.0000	-.7170	.0120	.0220			-.0100		-.0590	-.0910	-.0440	.0120	.0650
20.000	1.1810		.0870	-.6330	-.0600	.0110			-.0170		-.0780				
40.000	1.1810		.2830	-.3360	.0070	-.0250			-.0610		-.1430	-.1950	-.0380	.0240	.0920
55.000	1.1810		.3660	-.1350	.1590	.1890			.1410		.0340				
70.000	1.1810		.3660	-.0600	.1610	.2170			.1540		.0010	-.5840	-.0900	.0170	-.0120
90.000	1.1810	.9330	.3020	-.0620	.2120	.2430			.1720		-.0350	-.7260	-.1000	-.0090	-.0250
105.000	1.1810														
110.000	1.1810														
120.000	1.1810		.1760	-.0270	.2240	.3330			.2740		-.2080	-.8420	-.1260	-.0660	-.0640
135.000	1.1810									-.4880					
142.000	1.1810								.2660		-.7040	-.6840	-.0950	-.0470	-.0380
150.000	1.1810		.0420	-.0740	.1820	.5240		.5310							
157.000	1.1810								.0720						
162.000	1.1810										-.5760	-.5480	-.0840	-.0220	-.0170
165.000	1.1810								-.1410						
169.000	1.1810						.7170								
172.000	1.1810								.1960		-1.1060	-.4680	-.3280	-.1840	-.1150
180.000	1.1810	.5100	-.2330	-.1820	.0970	.5750									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI								-.1230		-.1410
.000	.0730									-.1440
40.000	.1120	.0500		-.0760	-.1800	-.3150	-.181			
70.000		-.2440	-.3390	-.1380	.0590	.0270	.0840	.0450		
90.000		-.2030	-.2020	-.0060	.0070	-.0210	.0440	.0290		
105.000				.1040	-.0330	-.0520	.0130	-.0050		
110.000									-.1700	
120.000		-.1970	.0180	.3800	-.1760	-.1050	.0130	.0440	-.1160	
135.000				.2540	-.0710	-.1510	-.0360	-.0780		
150.000		-.1060	.0860	.0700	-.1840	-.0740	-.0420	-.1220		
165.000		-.0620		.1250	.0810	-.0100	-.0030	-.2080		
180.000		-.1360	-.0230	.0240						

AMES 11-7D7 OA12 OEA ORBITER FUSELAGE (RBPB08)

MACH (2) = .903 BETA (2) = -4.030

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1351	.1906	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2080	.7550	.0000	-.6140	.0530	.0510			.0200		-.0510	-.0750	-.0320	.0350	.0060
20.000	1.2080		.0670	-.6710	-.0060	.0390			.0170		-.0590				
40.000	1.2080		.1870	-.4870	.0270	.0350			.0090		-.1030	-.1630	-.0410	.0460	.1020
55.000	1.2080		.2290	-.3380	.1060	.1330			.0870		-.0340				
70.000	1.2080		.2110	-.2540	.0880	.1500			.0860		-.0830	-.6300	-.1410	-.0020	-.0380
90.000	1.2080	.8230	.1320	-.2410	.1370	.1760			.0940		-.1220	-.7680	-.1550	-.0160	-.0390
105.000	1.2080														
110.000	1.2080														
120.000	1.2080		.0380	-.1620	.1700	.2740			.1600		-.2790	-.8780	-.1560	-.0340	-.0460
135.000	1.2080														
142.000	1.2080									-.7100					
150.000	1.2080		-.0420	-.1960	.1800	.5040			.1590		-.7000	-.6620	-.0640	-.0150	-.0140
157.000	1.2080							.4820							
162.000	1.2080								.0210						
165.000	1.2080										-.8490	-.4700	-.0620	.0090	-.0120
169.000	1.2080								-.1210						
172.000	1.2080						.7430								
180.000	1.2080	.5230	-.2260	-.1860	.1470	.6230			.2170		-1.2150	-.4230	-.1860	-.0300	-.0550

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
.000	.0970							-.1260		-.1320
40.000	.1310	.0860		-.0450	-.1470	-.2920	-.3190			-.1430
70.000		-.2770	-.3610	-.2100	-.0810	-.0540	.0260	.0180		
90.000		-.2270	-.2170	-.0800	-.1690	-.0960	-.0120	-.0010		
105.000				.0050	-.2310	-.1200	-.0410	-.0350		
110.000									-.1810	
120.000		-.1740	.0180	.2700	-.3370	-.1250	-.0340	-.0280	-.1340	
135.000				.3320	-.0860	-.1410	-.0690	-.0920		
150.000		-.0940	.0640	.1300	-.1290	-.1620	-.0960	-.1580		
165.000		-.0810		.1410	.0600	-.1480	-.1190	-.1870		
180.000		-.0890	.0130	.0670						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB08)

MACH (2) = .901 BETA (3) = .090

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1508	.1581	.1732	.1958	.2239	.2711	.3200	.3953	.5120
PHI															
.000	1.2180	.7570	.0000	-.5990	.0270	.0460			.0150		-.0510	-.0770	-.0260	.0340	.0800
20.000	1.2180		.0170	-.6210	.0260	.0440			.0130		-.0600				
40.000	1.2180		.0880	-.6060	.0340	.0550			.0150		-.1090	-.1640	-.0600	.0380	.0960
55.000	1.2180		.0890	-.5830	.0540	.0810			.0230		-.1100				
70.000	1.2180		.0440	-.4910	.0250	.0940			.0160		-.1720	-.6640	-.1400	-.0170	-.0510
90.000	1.2180	.7010	-.0390	-.4680	.0750	.1110			.0160		-.2300	-.7960	-.1760	-.0130	-.0350
105.000	1.2180														
110.000	1.2180														
125.000	1.2180		-.0940	-.3800	.1090	.2070			.0290		-.4640	-.9060	-.1440	-.0420	-.0140
135.000	1.2180									-1.0000					
142.000	1.2180								.1010		-.8470	-.5440	-.0650	.0130	-.0050
150.000	1.2180		-.1130	-.2810	.1480	.4570		.3970							
157.000	1.2180								-.0540						
162.000	1.2180										-.9450	-.4710	-.0700	.0270	-.0190
165.000	1.2180								-.1160						
169.000	1.2180						.7310								
172.000	1.2180								.2220		-.8910	-.5330	-.0520	.0110	-.0070
180.000	1.2180	.5380	-.2220	-.1640	.1620	.6370									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0990							-.1140		-.1290
40.000	.1250	.0900		-.0380	-.1240	-.2830	-.3320			-.1430
70.000		-.2850	-.3210	-.2620	-.1790	-.3670	-.0190	-.1270		
90.000		-.2210	-.1830	-.1530	-.2870	-.4750	-.0520	-.0410		
105.000				-.1050	-.3320	-.4950	-.0660	-.0730		
110.000									-.1900	
125.000		-.1320	.0300	.0810	-.4320	-.5600	-.0540	-.0680	-.1590	
135.000				.3310	-.0780	-.5730	-.1100	-.1280		
150.000		-.0720	.0680	.2160	-.0460	-.4430	-.1810	-.1980		
165.000		-.0660		.1680	.0800	-.3440	-.2390	-.1840		
180.000		-.0640	.0370	.0850						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBPB08)

MACH (2) = .903 BETA (4) = 4.220

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2110	.7480	.0000	-.6190	.0420	.0450			.0170		-.0540	-.0770	-.0370	.0260	.0770
20.000	1.2110		-.0300	-.6250	.0350	.0430			.0200		-.0720				
40.000	1.2110		-.0110	-.6910	.0400	.0500			.0070		-.1500	-.1900	-.1070	.0100	.0770
55.000	1.2110		-.0470	-.7170	.0280	.0320			-.0260		-.1840				
70.000	1.2110		-.1000	-.6350	.0180	.0480			-.0330		-.2710	-.6960	-.1450	-.0420	-.0480
90.000	1.2110	.5720	-.1820	-.5910	.0530	.0630			-.0430		-.3390	-.7930	-.1620	-.0190	-.0250
105.000	1.2110														
110.000	1.2110														
120.000	1.2110		-.2210	-.5250	.0510	.1360			-.0860		-.5790	-.7560	-.1470	.0010	-.0050
135.000	1.2110									-1.1440					
142.000	1.2110								.0260		-.5750	-.5510	-.2460	.0320	.0480
150.000	1.2110		-.1900	-.3710	.0980	.3830		.2790							
157.000	1.2110								-.1520						
162.000	1.2110										-.6290	-.5640	-.2690	.0430	.0660
165.000	1.2110								-.1280						
169.000	1.2110						.6800								
172.000	1.2110								.2120		-1.2350	-.4120	-.2030	-.0230	-.0480
180.000	1.2110	.5370	-.2240	-.1650	.1480	.6180									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0910							-.1170		-.1320
40.000	.1090	.0920		-.0210	-.1100	-.2650	-.3520			-.1580
70.000		-.2810	-.2890	-.3010	-.2700	-.5270	-.1290	-.0680		
90.000		-.1980	-.1660	-.2240	-.3590	-.5320	-.1630	-.0910		
105.000				-.1900	-.4160	-.5440	-.2090	-.1150		
110.000									-.2290	
120.000		-.1120	-.0030	-.1050	-.5520	-.6100	-.2940	-.1110	-.1820	
135.000				.3240	-.0990	-.6470	-.5040	-.1610		
150.000		-.0640	.0570	.2450	.0150	-.4670	-.4610	-.2080		
165.000		-.0620		.1670	.0960	-.4170	-.4080	-.1920		
180.000		-.0870	.0180	.0670						

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBPB08)

MACH (2) = .951 BETA (5) = 8.370

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0198	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1800	.7200	.0000	-.6880	.0250	.0270			-.0020		-.0690	-.0820	-.0490	.0120	.0620
25.000	1.1800		-.0810	-.6750	.0130	.0240			.0010		-.0900				
40.000	1.1800		-.1170	-.7680	-.0010	.0150			-.0340		-.2140	-.2460	-.1630	-.0340	.0440
55.000	1.1800		-.1820	-.7300	-.0600	-.0130			-.0730		-.2410				
70.000	1.1800		-.2580	-.7440	-.1390	.0090			-.0760		-.3340	-.7250	-.1590	-.0550	-.0410
90.000	1.1800	.4310	-.3280	-.6340	-.1450	.0170			-.1010		-.4050	-.7840	-.1690	-.0230	-.0220
105.000	1.1800														
115.000	1.1800														
125.000	1.1800		-.3380	-.6290	-.0460	.0490			-.2030		-.5530	-.5810	-.2420	.0460	-.0460
135.000	1.1800														
142.000	1.1800									-.9490					
150.000	1.1800		-.2610	-.4470	.0150	.2790			-.0740		-.6780	-.5670	-.3260	.0230	-.0230
157.000	1.1800							.1240							
162.000	1.1800								-.2600						
165.000	1.1800										-.6490	-.5340	-.3070	-.0140	-.0440
169.000	1.1800								-.1570						
172.000	1.1800						.3900								
180.000	1.1800	.5200	-.2280	-.1670	.1050	.5610			.1740		-1.1500	-.4720	-.2830	-.1270	-.1250

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0720							-.1280		-.1470
45.000	.0840	.0780		-.0280	-.1010	-.2610	-.3080			-.1830
75.000		-.2480	-.2750	-.3190	-.3000	-.5680	-.2350	-.1110		
90.000		-.1820	-.1730	-.2550	-.3960	-.5630	-.3000	-.1240		
105.000				-.2280	-.4820	-.5660	-.4370	-.1570		
110.000									-.2410	
120.000		-.1080	-.0070	-.1360	-.6220	-.6590	-.6050	-.1540	-.1890	
135.000				.4030	-.0320	-.6920	-.5990	-.3110		
150.000		-.1010	.0110	.1270	-.1110	-.5340	-.6240	-.3970		
165.000		-.1020		.1260	.0580	-.5050	-.5270	-.2220		
180.000		-.1320	-.0240	.0220						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPBU9) (01 MAY 73)

AMES 11-707 OA12 OEA ORBITER FUSELAGE

PARAMETRIC DATA

ALPHA = 10.000 RUDDER = -10.000
ELEVON = .000 RUDFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0390 SCALE

MACH (1) = .599 BETA (1) = -8.060

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1906	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5120
PHI									.0510		.0340	.0310	.0530	.0680	.1060
.000	1.0020	.7210	.0000	-.3160	.0370	.0620			.0670		.0460				
20.000	1.0020		.1710	-.2290	.0440	.0680			.0970		.0470	.0430	.0930	.1160	.1590
40.000	1.0020		.3450	-.0380	.1300	.1070			.1280		.0460				
55.000	1.0020		.3880	.0350	.1850	.1690			.1060		-.0240	-.3440	-.1270	-.0750	-.1460
70.000	1.0020		.3280	.0160	.1230	.1550			.0950		-.0920	-.4830	-.1820	-.1430	-.1860
90.000	1.0020	.7770	.1760	-.0640	.1440	.1480									
105.000	1.0020								.1870		-.4230	-.4380	-.2460	-.2190	-.2330
110.000	1.0020														
120.000	1.0020		-.0520	-.1220	.0870	.1680				-.4630					
135.000	1.0020								-.1760		-.8240	-.2790	-.1770	-.1370	-.1420
142.000	1.0020							.2630							
150.000	1.0020		-.2340	-.1960	.0260	.3200			-.3480						
157.000	1.0020										-.4940	-.2250	-.1590	-.1210	-.1330
162.000	1.0020								-.5510						
165.000	1.0020														
169.000	1.0020						.4680		-.1630		-.6650	-.2600	-.2770	-.3550	-.1760
172.000	1.0020														
180.000	1.0020	.1570	-.4930	-.2650	-.0380	.3650									

X/LB	.0073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI								-.0680		-.1360
.000	.1020									-.1340
45.000	.1680	.1330		.0070	-.0570	-.1150	-.0830			
75.000		-.3480	-.2240	-.0890	.0840	.0320	.0440	-.0070		
90.000		-.2830	-.1270	.0230	.0770	-.0130	-.0180	-.0510		
105.000				.1530	.0550	-.0300	-.0390	-.0790		
110.000									-.1780	
120.000		-.2570	-.0120	.3800	-.0490	-.1180	-.0690	-.0690	-.1330	
135.000				.0280	-.2130	-.2800	-.1850	-.1960		
150.000		-.1500	-.0240	-.0490	-.2910	-.1480	-.0930	-.1600		
165.000		-.1400		-.0010	-.0060	-.0640	-.0800	-.1840		
180.000		-.1710	-.0910	-.0840						

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBPB09)

MACH (1) = .601 BETA (2) = -3.980

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1953	.2259	.2711	.3200	.3953	.3120
PHI															
.000	1.0440	.7670	.0000	-.2840	.0390	.0840			.0720		.0480	.0450	.0690	.0870	.1140
20.000	1.0440		.1450	-.2170	.0680	.0930			.0790		.0520				
40.000	1.0440		.2530	-.0970	.1120	.1200			.1020		.0210	.0090	.0680	.0980	.1470
55.000	1.0440		.2450	-.0900	.1060	.0860			.0470		-.0280				
70.000	1.0440		.1550	-.1260	.0190	.0850			.0360		-.0890	-.4030	-.1770	-.1230	-.1820
90.000	1.0440	.6610	.0020	-.1990	.0660	.0810			.0240		-.1530	-.5250	-.2020	-.1560	-.1910
105.000	1.0440														
110.000	1.0440														
120.000	1.0440		-.1850	-.2080	.0460	.1230			.0920		-.4370	-.4200	-.2230	-.1780	-.1900
135.000	1.0440														
142.000	1.0440									-.5190					
150.000	1.0440		-.3010	-.2420	.0300	.3100			-.2290		-.7620	-.2590	-.1570	-.1190	-.1180
157.000	1.0440							.2170							
162.000	1.0440								-.4150						
165.000	1.0440										-.5070	-.2190	-.1510	-.1010	-.1210
169.000	1.0440								-.5580						
172.000	1.0440						.4960								
180.000	1.0440	.1560	-.4740	-.1780	.0030	.4160			-.1280		-.6020	-.2010	-.1670	-.1530	-.1230

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1170							-.0690		-.1370
40.000	.1640	.1400		.0250	-.0470	-.1080	-.0830			-.1360
70.000		-.4200	-.3130	-.1900	-.0040	-.0380	-.0100	-.0350		
90.000		-.3080	-.1760	-.0740	-.0200	-.0800	-.0500	-.0730		
105.000				.0320	-.0490	-.1040	-.0850	-.1110		
110.000									-.1840	
120.000		-.2200	-.0050	.2620	-.1670	-.1660	-.0950	-.0870	-.1440	
135.000				.1620	-.1650	-.2530	-.1550	-.1730		
150.000		-.1370	.0010	.0180	-.2190	-.1950	-.1360	-.1810		
165.000		-.1250		.0360	.0100	-.1460	-.1620	-.1760		
180.000		-.1100	-.0240	.0020						

AMES 11-7D7 OA12 O2A ORBITER FUSELAGE (RBPBU9)

MACH (1) = .6U0 BETA (3) = .0U0

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0500	.7810	.0000	-.2640	.0710	.0960			.0850		.0620	.0540	.0760	.0950	.1230
20.000	1.0500		.1140	-.2250	.0710	.0940			.0890		.0480				
40.000	1.0500		.1410	-.1700	.0760	.1000			.0730		-.0360	-.0560	.0160	.0620	.1210
55.000	1.0500		.0840	-.2200	.0210	.0030			-.0290		-.0950				
70.000	1.0500		-.0270	-.2690	-.0650	.0180			-.0330		-.1490	-.4540	-.2140	-.1580	-.2140
90.000	1.0500	.5210	-.1840	-.3260	-.0650	.0210			-.0390		-.2030	-.5600	-.2190	-.1630	-.1880
105.000	1.0500														
110.000	1.0500														
120.000	1.0500		-.3210	-.2980	.0040	.0760			-.0150		-.4370	-.3880	-.1830	-.1490	-.1480
135.000	1.0500														
142.000	1.0500									-.5690					
150.000	1.0500		-.3620	-.2870	.0110	.2720			-.3030		-.6850	-.2360	-.1270	-.0920	-.1000
157.000	1.0500							.1380							
162.000	1.0500								-.5120						
165.000	1.0500										-.5180	-.2060	-.1290	-.0650	-.0880
169.000	1.0500								-.5800						
172.000	1.0500						.4890								
180.000	1.0500	.1560	-.4660	-.1710	.0190	.4330			-.1180		-.5770	-.1740	-.1170	-.0760	-.0690

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1300							-.0620		-.1330
40.000	.1550	.1420		.0380	-.0250	-.0980	-.0900			-.1330
75.000		-.4570	-.3700	-.2730	-.0930	-.1140	-.0650	-.0670		
90.000		-.3260	-.2440	-.1880	-.1560	-.1400	-.0970	-.0980		
105.000				-.1520	-.1590	-.1660	-.1340	-.1370		
110.000									-.2060	
120.000		-.1950	.0010	.0780	-.3370	-.2250	-.1310	-.1110	-.1560	
135.000				.2310	-.1480	-.2660	-.1710	-.1640		
150.000		-.1300	-.0010	.1560	-.1300	-.2570	-.2120	-.2130		
165.000		-.0980		.0730	.0700	-.2230	-.2090	-.1930		
180.000		-.0880	-.0030	-.0040						

AMES 11-7X7 OA12 OBA ORBITER FUSELAGE (RBPB09)

MACH (1) = .999 BETA (4) = 4.170

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0444	.0675	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3248	.3953	.5129
PHI															
.000	1.0130	.7550	.0660	-.2850	.0620	.0870			.0740		.0470	.0520	.0670	.0890	.1130
20.000	1.0130		.0350	-.2650	.0540	.0780			.0710		.0300				
40.000	1.0130		-.0010	-.2670	.0110	.0420			.0660		-.1290	-.1470	-.0620	.0150	.0480
55.000	1.0130		-.0990	-.3590	-.0700	-.0820			-.1100		-.1580				
75.000	1.0130		-.2250	-.4110	-.1460	-.0380			-.0810		-.1970	-.4770	-.2330	-.1750	-.2220
90.000	1.0130	.3660	-.3790	-.4470	-.0630	-.0300			-.0500		-.2340	-.5540	-.2690	-.1530	-.1770
105.000	1.0130														
110.000	1.0130														
120.000	1.0130		-.4500	-.4010	-.0450	.0130			-.1300		-.4220	-.3540	-.1490	-.1080	-.1160
135.000	1.0130														
142.000	1.0130									-.6200					
150.000	1.0130		-.4270	-.3520	-.0120	.2090			-.3850		-.5970	-.2110	-.1050	-.0740	-.0780
157.000	1.0130							.0170							
162.000	1.0130								-.6410						
165.000	1.0130										-.5180	-.1850	-.1110	-.0670	-.0810
169.000	1.0130								-.6210						
172.000	1.0130						.4420								
180.000	1.0130	.1690	-.4490	-.2100	.0120	.4140			-.1270		-.5830	-.1910	-.1430	-.1230	-.1200

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1190							-.0750		-.1410
40.000	.1260	.1250		.0360	-.0260	-.1000	-.0950			-.1490
70.000		-.4360	-.3900	-.3110	-.1740	-.1690	-.1060	-.1030		
90.000		-.3310	-.2620	-.2820	-.2490	-.1920	-.1350	-.1220		
105.000				-.2750	-.2680	-.2100	-.1700	-.1570		
110.000									-.2260	
120.000		-.1960	-.0620	-.1790	-.1830	-.2810	-.1680	-.1410	-.1840	
135.000				.3010	-.1640	-.3240	-.2070	-.1790		
150.000		-.1120	.0200	.2220	-.1010	-.3380	-.2590	-.2350		
165.000		-.1000		.1150	.0510	-.3310	-.2700	-.1810		
180.000		-.1090	-.0240	.0060						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7ft O-12 O2A ORBITER FUSELAGE (RBPBU9)

MACH (1) = .399 BETA (5) = 8.240

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9920	.7320	.0000	-.2940	.0390	.0700			.0610		.0350	.0410	.0530	.0750	.1020
20.000	.9920		-.0360	-.3010	.0190	.0500			.0470		.0040				
40.000	.9920		-.1490	-.3580	-.0580	-.0340			-.0790		-.2570	-.2600	-.1680	-.0510	.0420
55.000	.9920		-.2670	-.4770	-.1530	-.1520			-.1610		-.2120				
70.000	.9920		-.4080	-.5320	-.2050	-.0850			-.1220		-.2280	-.4950	-.2440	-.1940	-.2340
90.000	.9920	.2090	-.5500	-.5730	-.1040	-.0680			-.1320		-.2620	-.5440	-.2010	-.1450	-.1670
105.000	.9920														
110.000	.9920														
120.000	.9920		-.5740	-.5090	-.0920	-.0450			-.2240		-.4120	-.3260	-.1300	-.0870	-.1160
135.000	.9920									-.7960					
142.000	.9920								-.4750		-.5390	-.2100	-.0990	-.0690	-.0860
150.000	.9920		-.5030	-.4180	-.0680	.1230		-.1270							
157.000	.9920								-.7850						
162.000	.9920										-.5220	-.1830	-.1180	-.0790	-.1000
165.000	.9920								-.6680						
169.000	.9920						.3590								
172.000	.9920								-.1790		-.6480	-.2430	-.2220	-.3460	-.1760
180.000	.9920	.1530	-.4620	-.2510	-.0260	.3520									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI								-.0720		-.1410
.000	.1080									-.1480
40.000	.0940	.1030		.0390	-.0120	-.0960	-.0930			
70.000		-.4420	-.3110	-.3670	-.2390	-.2020	-.1270	-.1120		
90.000		-.3410	-.3260	-.3670	-.2970	-.2370	-.1710	-.1430		
105.000				-.3560	-.3460	-.2650	-.2060	-.1870		
110.000									-.2280	
120.000		-.2110	-.0850	-.2510	-.6670	-.3490	-.2160	-.1800	-.2080	
135.000				.3530	-.2040	-.4120	-.2730	-.2170		
150.000		-.1270	-.0150	.1490	-.1870	-.4770	-.3850	-.3250		
165.000		-.1350		.0770	-.0220	-.5060	-.3970	-.2060		
180.000		-.1680	-.0990	-.0830						

AMES 11-7U7 OA12 OEA ORBITER FUSELAGE (RBPB09)

MACH (2) = .904 BETA (1) = -8.160

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1470	.8800	.0000	-.4480	.0770	.1160			.0920		.0370	.0110	.0210	.0820	.1460
25.000	1.1470		.3180	-.2990	.0790	.1240			.1080		.0390				
40.000	1.1470		.4610	-.0540	.1760	.1600			.1410		.0460	-.0080	.0490	.1320	.2030
55.000	1.1470		.4850	.0180	.2360	.2320			.2000		.0880				
75.000	1.1470		.4290	-.0010	.1610	.2310			.1950		.0330	-.5610	-.2850	-.0460	-.0650
90.000	1.1470	.9030	.2690	-.1050	.1910	.2390			.2070		-.0310	-.7150	-.3280	-.1040	-.1040
105.000	1.1470														
110.000	1.1470														
120.000	1.1470		.0160	-.1950	.1400	.2870			.3440		-.3530	-.8960	-.3110	-.1740	-.1690
135.000	1.1470														
142.000	1.1470									-.5020					
150.000	1.1470		-.1730	-.4390	.0850	.4750			.1340		-.8220	-.7870	-.3120	-.0730	-.0730
157.000	1.1470							.4860							
162.000	1.1470								.0040						
165.000	1.1470										-.6340	-.6070	-.2950	-.0290	-.0760
169.000	1.1470								-.2510						
172.000	1.1470						.5660								
180.000	1.1470	.3060	-.4480	-.5580	.0350	.5240			.0910		-1.1060	-.5520	-.3640	-.1520	-.1020

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1680							-.1760		-.1630
40.000	.2420	.2130		.0560	-.0620	-.2060	-.2740			-.1590
75.000		-.3760	-.6550	-.1160	.0440	-.1240	-.0680	-.0440		
90.000		-.3120	-.5320	.0500	-.0020	-.1770	-.0950	-.0510		
105.000				.0710	.0350	-.2270	-.1170	-.0820		
110.000									-.1960	
120.000		-.3690	-.1540	.4390	-.0650	-.3340	-.0870	-.0590	-.1490	
135.000				.1700	-.1320	-.3750	-.1350	-.1500		
150.000		-.2320	-.0260	-.0030	-.2750	-.1400	-.0670	-.1610		
165.000		-.2070		.0440	-.0080	-.1140	-.0680	-.2170		
180.000		-.2000	-.0700	-.0140						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPBU9)

MACH (2) = .902 BETA (2) = -4.040

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1715	.9120	.0000	-.4050	.1100	.1380			.1110		.0550	.0200	.0380	.0940	.1630
20.000	1.1715		.2900	-.3150	.1120	.1400			.1190		.0490				
40.000	1.1715		.3700	-.1510	.1550	.1760			.1430		.0320	-.0300	.0190	.1130	.1910
55.000	1.1715		.3480	-.1410	.1510	.1570			.1220		.0140				
70.000	1.1715		.2640	-.1740	.0640	.1670			.1200		-.0460	-.6100	-.3990	-.0800	-.1020
90.000	1.1715	.7920	.0970	-.2780	.1150	.1860			.1360		-.1170	-.7670	-.3680	-.1110	-.1060
105.000	1.1715														
110.000	1.1715														
120.000	1.1715		-.1230	-.3640	.1080	.2570			.2450		-.4160	-.9110	-.3460	-.1140	-.1140
135.000	1.1715														
142.000	1.1715									-.6700					
150.000	1.1715		-.2560	-.4890	.1010	.4680			.1040		-.8290	-.6410	-.2920	-.0290	-.0520
157.000	1.1715							.4550							
162.000	1.1715								-.0490						
165.000	1.1715										-.8480	-.4930	-.2970	.0220	-.0540
169.000	1.1715								-.2270						
172.000	1.1715						.6810								
180.000	1.1715	.3100	-.4660	-.5350	.0850	.5640			.1110		-1.1460	-.4830	-.2320	-.0630	-.0530

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1830							-.2490		-.1500
40.000	.2320	.2200		.0750	-.0340	-.1970	-.2660			-.1540
70.000		-.4050	-.6850	-.2330	-.0500	-.2800	-.1330	-.1070		
90.000		-.3240	-.5520	-.0680	-.1000	-.2770	-.1390	-.0890		
105.000				-.0380	-.0850	-.3100	-.1510	-.1130		
110.000									-.2170	
120.000		-.3140	-.1220	.3020	-.2090	-.4040	-.1150	-.0920	-.1670	
135.000				.2660	-.1050	-.5140	-.1520	-.1540		
150.000		-.2020	-.0220	.0410	-.1790	-.2830	-.1480	-.1930		
165.000		-.1470		.0800	-.0050	-.2540	-.1860	-.2000		
180.000		-.1590	-.0570	.0100						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (R3PBU9)

MACH (2) = .899 BETA (3) = .090

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1820	.9120	.0000	-.3950	.1160	.1390			.1120		.0560	.0250	.0430	.1020	.1670
20.000	1.1820		.2300	-.3580	.1140	.1390			.1170		.0460				
40.000	1.1820		.2510	-.2840	.1130	.1530			.1180		-.0250	-.0820	-.0520	.0790	.1680
55.000	1.1820		.1960	-.3360	.0630	.0800			.0480		-.0660				
70.000	1.1820		.0920	-.4110	-.0110	.1060			.0560		-.1270	-.6710	-.4500	-.1030	-.1320
90.000	1.1820	.6690	-.0700	-.4920	.0660	.1320			.0710		-.2080	-.8270	-.2600	-.0970	-.1030
105.000	1.1820														
110.000	1.1820														
120.000	1.1820		-.2460	-.5030	.0900	.2170			.1260		-.5000	-.9550	-.2970	-.0440	-.0620
135.000	1.1820														
142.000	1.1820									-.8350					
150.000	1.1820		-.3150	-.5070	.1060	.4320			.0560		-.9040	-.5600	-.1540	.0110	-.0320
157.000	1.1820							.3870							
162.000	1.1820								-.1110						
165.000	1.1820										-.9460	-.4820	-.1870	.0330	-.0220
169.000	1.1820								-.2110						
172.000	1.1820						.6690								
180.000	1.1820	.3310	-.4580	-.5140	.1050	.5800			.1200		-.7720	-.6100	-.1050	.0680	-.0200

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1920							-.2600		-.1440
40.000	.2120	.2150		.0830	-.0170	-.1910	-.2630			-.1640
70.000		-.4500	-.6740	-.2500	-.1300	-.4240	-.2800	-.1030		
90.000		-.3280	-.4900	-.2200	-.2110	-.3610	-.4620	-.0820		
105.000				-.2020	-.2270	-.4090	-.4640	-.1120		
110.000									-.2230	
120.000		-.2450	-.0820	.1230	-.3530	-.5010	-.4040	-.0850	-.1810	
135.000				.2840	-.0950	-.5070	-.3140	-.1520		
150.000		-.1730	-.0390	.1760	-.0960	-.4140	-.2970	-.2330		
165.000		-.1510		.1060	.0430	-.3670	-.2890	-.1940		
180.000		-.1280	-.0370	.0290						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPBU9)

MACH (2) = .898 BETA (4) = 4.200

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1735	.6980	.0000	-.4230	.1080	.1320			.1070		.0540	.0180	.0410	.0950	.1600
20.000	1.1730		.1740	-.4000	.0960	.1240			.1040		.0320				
40.000	1.1730		.1350	-.4410	.0540	.1020			.0560		-.1130	-.1610	-.1300	.0220	.1330
55.000	1.1730		.0450	-.5740	-.0250	.0030			-.0240		-.1440				
70.000	1.1730		-.0730	-.6130	-.0820	.0560			.0000		-.2040	-.7020	-.3350	-.1390	-.1470
90.000	1.1730	.5370	-.2270	-.6070	.0410	.0880			.0090		-.2920	-.8420	-.2520	-.0950	-.0910
105.000	1.1730														
110.000	1.1730														
120.000	1.1730		-.3670	-.5760	.0640	.1650			.0130		-.5340	-.8800	-.2030	-.0320	-.0400
135.000	1.1730														
142.000	1.1730									-.9910					
150.000	1.1730		-.3890	-.5440	.0790	.3790			-.0110		-.6140	-.5430	-.2900	.0180	-.0210
157.000	1.1730							.2830							
162.000	1.1730								-.2050						
165.000	1.1730										-.6090	-.5720	-.3060	.0380	-.0150
169.000	1.1730								-.2220						
172.000	1.1730						.6310								
180.000	1.1730	.3290	-.4630	-.5210	.0830	.5650			.1070		-1.1550	-.4720	-.2500	-.0510	-.0580

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1790							-.1980		-.1490
40.000	.1810	.1940		.0820	-.0090	-.1880	-.2660			-.1740
70.000		-.4110	-.5770	-.3090	-.3110	-.5230	-.4850	-.1610		
90.000		-.3090	-.3750	-.2820	-.3950	-.4880	-.5710	-.1530		
105.000				-.2520	-.4000	-.5140	-.5730	-.1870		
110.000									-.2570	
120.000		-.2050	-.1100	-.1610	-.4920	-.5930	-.4890	-.2080	-.1980	
135.000				.2500	-.1140	-.5930	-.4580	-.2990		
150.000		-.1450	-.0200	.2100	-.0320	-.4860	-.4320	-.2960		
165.000		-.1310		.1280	.0600	-.4160	-.3940	-.1990		
180.000		-.1510	-.0480	.0170						

AMES 11-7X7 OA12 O2A ORBITER FUSELAGE (RBPB09)

MACH (2) = .900 BETA (5) = 8.330

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1490	.8720	.0000	-.4290	.0820	.1140			.0990		.0340	.0220	.0210	.0770	.1450
20.000	1.1490		.1140	-.4370	.0600	.1010			.0870		.0040				
40.000	1.1490		.0240	-.5540	-.0230	.0320			-.0200		-.2300	-.2560	-.2380	-.0410	.0790
55.000	1.1490		-.1980	-.7090	-.1260	-.0660			-.0820		-.2090				
70.000	1.1490		-.2180	-.6710	-.1780	.0170			-.0410		-.2600	-.7140	-.3450	-.1600	-.1590
90.000	1.1490	.4080	-.3550	-.6320	-.1450	.0490			-.0360		-.3140	-.8530	-.2360	-.0920	-.0930
105.000	1.1490														
110.000	1.1490														
120.000	1.1490		-.4640	-.6120	-.0560	.1080			-.0820		-.4850	-.7040	-.2250	-.0290	-.0420
135.000	1.1490														
142.000	1.1490									-.8360					
150.000	1.1490		-.4550	-.6270	.0070	.3020			-.0860		-.7320	-.5840	-.3470	-.0650	-.0180
157.000	1.1490							.1550							
162.000	1.1490								-.3000						
165.000	1.1490										-.5980	-.5640	-.2880	-.0630	-.0310
169.000	1.1490								-.2420						
172.000	1.1490						.5570								
180.000	1.1490	.3190	-.4660	-.5420	.0370	.5140			.0730		-1.1260	-.5090	-.3620	-.1540	-.1010

X/LB	.5873	.6628	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1630							-.1640		-.1580
45.000	.1390	.1670		.0850	-.0040	-.1720	-.2440			-.1990
70.000		-.3810	-.5360	-.3640	-.3350	-.5640	-.6220	-.1600		
90.000		-.3100	-.4130	-.3390	-.4370	-.5440	-.6070	-.1920		
105.000				-.3190	-.4840	-.5430	-.5980	-.2690		
110.000									-.2630	
120.000		-.2080	-.1280	-.1990	-.5940	-.6320	-.5750	-.5040	-.2010	
135.000				.3320	-.0620	-.6290	-.5300	-.4510		
150.000		-.1550	-.0390	.1380	-.1270	-.5270	-.5480	-.3790		
165.000		-.1480		.0920	.0110	-.4930	-.4880	-.2220		
180.000		-.1950	-.0690	-.0120						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB10) (01 MAY 73)

REFERENCE DATA

SREF = 2.421U SQ.FT. XMRP = 28.53UU INCHES
LREF = 39.849U INCHES YMRP = .UUUU INCHES
BREF = 39.849U INCHES ZMRP = .UUUU INCHES
SCALE = .03UU SCALE

PARAMETRIC DATA

ALPHA = 15.UUU RUDDER = -10.UUU
ELEVON = .UUU RUDFLR = .UUU

MACH (1) = .398 BETA (1) = -8.U4U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.UUUU	.UU75	.U188	.U339	.U602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.UUU	.9350	.864U	.UUUU	-.105U	.151U	.153U			.144U		.118U	.12UU	.138U	.157U	.187U
20.UUU	.9350		.3U3U	-.UU2U	.163U	.179U			.171U		.136U				
40.UUU	.9350		.511U	.144U	.246U	.233U			.215U		.14UU	.1U9U	.172U	.2U9U	.253U
55.UUU	.9350		.475U	.121U	.211U	.147U			.113U		.U35U				
70.UUU	.9350		.349U	.U25U	.U78U	.133U			.U94U		-.U43U	-.369U	-.219U	-.161U	-.272U
9U.UUU	.9350	.7U9U	.1U6U	-.13UU	.U9UU	.U99U			.U69U		-.129U	-.575U	-.294U	-.251U	-.276U
105.UUU	.9350														
110.UUU	.9350														
120.UUU	.9350		-.228U	-.256U	-.U17U	.U91U			.2U1U		-.565U	-.549U	-.362U	-.342U	-.346U
135.UUU	.9350														
142.UUU	.9350									-.545U					
150.UUU	.935U		-.444U	-.365U	-.U67U	.254U			-.259U		-.956U	-.3U7U	-.2U9U	-.181U	.197U
157.UUU	.9350							.188U							
162.UUU	.9350								-.45UU						
165.UUU	.935U										-.53UU	-.254U	-.19UU	-.183U	-.2UUU
169.UUU	.9350								-.68UU						
172.UUU	.9350						.4U9U								
180.UUU	.935U	-.U99U	-.7UUU	-.237U	-.U94U	.322U			-.26UU		-.657U	-.253U	-.328U	-.273U	-.155U

X/LB	.5673	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.UU15	1.U392
PHI										
.UUU	.193U							-.U48U		-.128U
40.UUU	.277U	.254U		.1U2U	.U2UU	-.U66U	-.U56U			-.122U
7U.UUU		-.638U	-.457U	-.311U	-.1U7U	-.129U	-.U79U	-.U72U		
9U.UUU		-.369U	-.231U	-.1U6U	-.U6U	-.U88U	-.U82U	-.U89U		
..				.U93U	-.U45U	-.1U5U	-.1U9U	-.128U		
110.UUU									-.2U9U	
120.UUU		-.333U	-.U66U	.342U	-.U75U	-.161U	-.1U4U	-.U87U	-.144U	
135.UUU				-.U32U	-.295U	-.356U	-.248U	-.245U		
150.UUU		-.2UUU	-.U71U	-.U87U	-.355U	-.2UU	-.136U	-.194U		
165.UUU		-.2U9U		-.U54U	-.U61U	-.126U	-.129U	-.213U		
180.UUU		-.163U	-.U87U	-.U95U						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB1D)

MACH (1) = .599 BETA (2) = -5.980

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE Cp

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9590	.9090	.0000	-.0810	.1780	.1750			.1590		.1320	.1320	.1500	.1710	.2000
20.000	.9590		.3810	-.0030	.1780	.1910			.1780		.1410				
40.000	.9590		.4140	.0710	.2070	.2080			.1840		.0630	.0250	.1030	.1640	.2240
55.000	.9590		.3340	-.0110	.0990	.0410			.0130		-.0540				
75.000	.9590		.1740	-.1240	-.0320	.0560			.0170		-.1140	-.4450	-.2680	-.2190	-.3340
90.000	.9590	.5870	-.0750	-.2610	.0120	.0430			.0420		-.1960	-.6260	-.3210	-.2650	-.2730
105.000	.9590														
110.000	.9590														
125.000	.9590		-.3530	-.3210	-.0350	.0670			.1170		-.5750	-.5130	-.3190	-.2810	-.2780
135.000	.9590														
142.000	.9590									-.5870					
150.000	.9590		-.5010	-.4210	-.0480	.2620			-.3050		-.8680	-.2860	-.1870	-.1540	-.1710
157.000	.9590							.1660							
162.000	.9590								-.5120						
165.000	.9590										-.5240	-.2350	-.1770	-.1060	-.1750
169.000	.9590								-.6840						
172.000	.9590						.4350								
180.000	.9590	-.0800	-.6820	-.2370	-.0570	.3700			-.2310		-.5890	-.1950	-.1560	-.1620	-.1030

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2070							-.0490		-.1280
40.000	.2600	.2490		.1060	.0330	-.0710	-.0640			-.1170
75.000		-.6310	-.4990	-.3860	-.2070	-.2710	-.1860	-.1470		
90.000		-.4210	-.3180	-.2420	-.1980	-.2160	-.1690	-.1530		
105.000				-.0590	-.1940	-.2180	-.1880	-.1760		
110.000									-.2430	
120.000		-.2840	-.0480	.2100	-.2270	-.2450	-.1640	-.1360	-.1720	
135.000				.1210	-.2390	-.3260	-.2190	-.2180		
150.000		-.1870	-.0410	-.0270	-.2580	-.2470	-.1900	-.2200		
165.000		-.1810		-.0180	-.0280	-.2110	-.1990	-.2060		
180.000		-.1140	-.0400	-.0340						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB10)

MACH (1) = .998 BETA (3) = .080

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9640	.9080	.0000	-.0790	.1820	.1780			.1610		.1390	.1340	.1560	.1730	.2050
25.000	.9640		.3280	-.0390	.1790	.1700			.1610		.1300				
40.000	.9640		.2920	-.0340	.1400	.1440			.1000		-.0450	-.0910	.0150	.0990	.1880
55.000	.9640		.1700	-.1610	-.0020	-.0700			-.0860		-.1360				
70.000	.9640		-.0180	-.2770	-.1480	-.0140			-.0560		-.1710	-.5080	-.3040	-.2600	-.3750
90.000	.9640	.4590	-.2580	-.3810	-.0570	-.0100			-.0590		-.2490	-.6360	-.3120	-.2720	-.2720
105.000	.9640														
115.000	.9640														
120.000	.9640		-.4810	-.4080	-.0570	.0450			.0210		-.5590	-.4610	-.2720	-.2170	-.2080
135.000	.9640									-.6240					
142.000	.9640								-.3730		-.7760	-.2570	-.1600	-.1360	-.1790
150.000	.9640		-.5510	-.4560	-.0450	.2460		.1120							
157.000	.9640								-.5940						
162.000	.9640										-.5260	-.2170	-.1480	-.0750	-.1200
165.000	.9540								-.6980						
169.000	.9640						.4310								
172.000	.9640								-.2190		-.5670	-.1680	-.1170	-.0780	-.0860
180.000	.9640	-.0730	-.6720	-.2270	-.0440	.3870									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2110							-.0480		-.1310
40.000	.2360	.2310		.1060	.0380	-.0760	-.0700			-.1280
70.000		-.6220	-.5190	-.4540	-.2860	-.3330	-.2210	-.1840		
90.000		-.4670	-.3750	-.3690	-.3450	-.3010	-.2270	-.1910		
105.000				-.2840	-.2840	-.3060	-.2460	-.2220		
115.000									-.2720	
120.000		-.2380	-.0480	-.0010	-.4030	-.3230	-.2130	-.1830	-.2070	
135.000				.2040	-.2040	-.3290	-.2200	-.2100		
150.000		-.2170	-.0790	.1600	-.2320	-.3320	-.2790	-.2800		
165.000		-.1360		.0340	.0810	-.2670	-.2520	-.2350		
180.000		-.1090	-.0280	-.0330						

AMES 11-7ft OA12 OEA ORBITER FUSELAGE (RBPB10)

MACH (1) = .396 BETA (4) = 4.170

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3209	.3953	.5125
PHI															
.000	.9745	.8980	.0000	-.0860	.1710	.1780			.1550		.1390	.1300	.1530	.1660	.2040
20.000	.9745		.2580	-.0650	.1550	.1570			.1460		.1110				
40.000	.9745		.1620	-.1340	.0620	.0510			-.0170		-.1960	-.2320	-.1030	.0200	.1360
55.000	.9745		-.0100	-.3070	-.1270	-.1850			-.1820		-.2180				
70.000	.9745		-.2230	-.4260	-.2350	-.0740			-.1160		-.2290	-.5400	-.3340	-.2950	-.4110
90.000	.9745	.2980	-.4480	-.5010	-.1150	-.0520			-.1110		-.2840	-.6400	-.3090	-.2580	-.2740
105.000	.9745														
110.000	.9745														
120.000	.9745		-.6190	-.5140	-.0870	.0120			-.0730		-.5330	-.4130	-.2160	-.1700	-.1710
135.000	.9745														
142.000	.9745									-.6510					
150.000	.9745		-.6250	-.4760	-.0660	.2030			-.4400		-.6940	-.2310	-.1230	-.1000	-.1310
157.000	.9745							.0150							
162.000	.9745								-.7140						
165.000	.9745										-.5440	-.1970	-.1260	-.0740	-.1060
169.000	.9745								-.7420						
172.000	.9745						.3930								
180.000	.9745	-.0710	-.6840	-.2320	-.0580	.3650			-.2400		-.5870	-.1760	-.1590	-.1470	-.1260

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2050							-.0480		-.1280
40.000	.1880	.2040		.1110	.0410	-.0670	-.0780			-.1310
70.000		-.6290	-.5280	-.4850	-.3510	-.3400	-.2380	-.1880		
90.000		-.4980	-.4300	-.4990	-.4150	-.3480	-.2550	-.2040		
105.000				-.4240	-.3940	-.3570	-.2700	-.2420		
110.000									-.2870	
120.000		-.2570	-.1180	-.2970	-.5680	-.3930	-.2530	-.2220	-.2250	
135.000				.1940	-.1760	-.3790	-.2590	-.2320		
150.000		-.1620	-.0050	.2540	-.1360	-.3730	-.2930	-.2720		
165.000		-.1240		.0990	.0460	-.3630	-.2960	-.2250		
180.000		-.1150	-.0340	-.0300						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7D7 OA12 O2A ORBITER FUSELAGE (RBPB10)

MACH (1) = .801 BETA (5) = 8.250

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9140	.8810	.0000	-.1040	.1470	.1560			.1440		.1120	.1150	.1270	.1500	.1810
20.000	.9140		.1790	-.1180	.1090	.1190			.1150		.0670				
40.000	.9140		.0130	-.2460	-.0490	-.0700			-.1450		-.3730	-.3900	-.2450	-.0720	.0670
55.000	.9140		-.1790	-.4560	-.2260	-.2830			-.2560		-.3080				
75.000	.9140		-.3990	-.5550	-.3020	-.1230			-.1650		-.2740	-.5730	-.3640	-.3170	-.4360
90.000	.9140	.1460	-.6160	-.6250	-.1510	-.0890			-.1500		-.3060	-.6390	-.2940	-.2440	-.2820
105.000	.9140														
110.000	.9140								-.1610		-.5060	-.3690	-.1770	-.1530	-.1910
120.000	.9140		-.7310	-.6150	-.1100	-.0330									
135.000	.9140									-.7170					
142.000	.9140								-.5140		-.6080	-.2040	-.1060	-.0630	-.1120
150.000	.9140		-.6990	-.5340	-.1050	.1290		-.1150							
157.000	.9140								-.8570						
162.000	.9140										-.5460	-.1900	-.1040	-.0620	-.1260
165.000	.9140								-.7890						
169.000	.9140						.3130								
172.000	.9140								-.2830		-.6470	-.2410	-.2980	-.2950	-.1680
180.000	.9140	-.1030	-.7080	-.2820	-.0990	.3070									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1990							-.0490		-.1350
40.000	.1370	.1730		.1100	.0450	-.0600	-.0790			-.1440
70.000		-.6110	-.5440	-.5180	-.3810	-.3620	-.2530	-.1910		
90.000		-.5250	-.4990	-.5690	-.4780	-.3840	-.2800	-.2130		
105.000				-.5310	-.4690	-.3860	-.3130	-.2680		
110.000									-.2940	
120.000		-.3410	-.1690	-.3540	-.7930	-.4700	-.3190	-.2560	-.2590	
135.000				.3320	-.2250	-.4570	-.3150	-.2630		
150.000		-.1680	-.0395	.1520	-.2380	-.4880	-.3980	-.3290		
165.000		-.1620		.0560	-.0380	-.5080	-.4170	-.2310		
180.000		-.1660	-.0910	-.1010						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB10)

MACH (2) = .902 BETA (1) = -8.130

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0920	.9900	.0000	-.1400	.1840	.2050			.1810		.1350	.1130	.1220	.1620	.2280
25.000	1.0920		.5020	-.0190	.2120	.2270			.2100		.1510				
40.000	1.0920		.5980	.1480	.2870	.2880			.2640		.1650	.1090	.1480	.2140	.2950
55.000	1.0920		.5710	.1320	.2550	.2270			.2060		.1190				
70.000	1.0920		.4510	.0330	.1150	.2250			.2020		.0590	-.5220	-.3430	-.1180	-.1630
90.000	1.0920	.8480	.2250	-.1480	.1360	.2090			.2050		-.0330	-.7090	-.4870	-.2030	-.1560
105.000	1.0920														
110.000	1.0920														
125.000	1.0920		-.1210	-.3420	.0480	.2360			.3860		-.4080	-.9200	-.5080	-.2710	-.2410
135.000	1.0920														
142.000	1.0920									-.5060					
150.000	1.0920		-.3350	-.6320	.0050	.4350			.0800		-.9240	-.6010	-.4340	-.1090	-.1200
157.000	1.0920							.4480							
162.000	1.0920								-.0440						
165.000	1.0920										-.6350	-.4920	-.4120	-.0820	-.1370
169.000	1.0920								-.3130						
172.000	1.0920						.6210								
180.000	1.0920	.1420	-.6210	-.6860	-.0010	.4840			.0170		-1.0690	-.6310	-.3790	-.0820	-.0890

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2510							-.1680		-.1570
40.000	.3370	.3250		.1520	.1400	-.1330	-.1950			-.1660
70.000		-.5890	-.8890	-.5300	-.2740	-.5540	-.5760	-.2280		
90.000		-.3730	-.6130	-.0360	-.2240	-.3710	-.5630	-.1160		
105.000				.1680	-.1370	-.3510	-.5310	-.1490		
110.000									-.2610	
125.000		-.4480	-.1130	.4870	-.0750	-.4350	-.5160	-.0780	-.1590	
135.000				.0800	-.2310	-.7990	-.3570	-.1730		
150.000		-.2840	-.0550	-.0270	-.3400	-.3990	-.2100	-.1970		
165.000		-.2660		.0040	-.0550	-.3260	-.1920	-.2330		
180.000		-.2230	-.0920	-.0540						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBPB10)

MACH (2) = .699 BETA (2) = -4.020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0073	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1190	1.0195	.0000	-.1160	.2030	.2190			.1960		.1510	.1250	.1330	.1760	.2430
20.000	1.1190		.4700	-.0390	.2220	.2340			.2170		.1540				
40.000	1.1190		.5040	.0520	.2430	.2640			.2340		.1060	.0430	.0840	.1750	.2690
55.000	1.1190		.4310	-.0250	.1500	.1250			.1140		.0310				
70.000	1.1190		.2850	-.1470	.0630	.1500			.1310		-.0230	-.5970	-.4420	-.1610	-.2330
90.000	1.1190	.7410	.0520	-.3390	.0670	.1570			.1440		-.1240	-.7760	-.6050	-.2160	-.1610
105.000	1.1190														
110.000	1.1190								.2920		-.4780	-.9680	-.4290	-.1960	-.1630
120.000	1.1190		-.2530	-.5150	.0410	.2210									
135.000	1.1190									-.6540					
142.000	1.1190								.0560		-.9320	-.5670	-.4060	-.1110	-.1010
150.000	1.1190		-.4130	-.5970	.0580	.4390		.4290							
157.000	1.1190								-.0810						
162.000	1.1190										-.8350	-.3970	-.4190	-.0620	-.1090
165.000	1.1190								-.2900						
169.000	1.1190						.6320								
172.000	1.1190								.0420		-1.0810	-.5200	-.2440	-.0530	-.0510
180.000	1.1190	.1450	-.6350	-.6270	.0640	.5170									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2670							-.2000		-.1670
40.000	.3200	.3220		.1670	.0610	-.1250	-.1880			-.1800
70.000		-.6200	-.8710	-.4330	-.4340	-.6290	-.7530	-.1560		
90.000		-.4160	-.5910	-.1660	-.4270	-.3880	-.6510	-.2660		
105.000				.0140	-.2970	-.3810	-.6300	-.3710		
110.000									-.2600	
120.000		-.3710	-.0370	.2970	-.1940	-.5410	-.5260	-.4280	-.1530	
135.000				.2210	-.1860	-.7250	-.4340	-.2930		
150.000		-.2430	-.0340	-.0050	-.2250	-.5160	-.3080	-.2680		
165.000		-.2440		.0410	-.0620	-.4320	-.3070	-.2310		
180.000		-.2080	-.0900	-.0440						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB1U)

MACH (2) = .901 BETA (3) = .080

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5120
PHI															
.000	1.1280	1.0230	.0000	-.1120	.2120	.2260			.2030		.1490	.1340	.1400	.1820	.2470
20.000	1.1280		.4200	-.0810	.2120	.2240			.2090		.1440				
40.000	1.1280		.3890	-.0750	.1740	.2060			.1690		.0100	-.0430	-.0030	.1170	.2350
55.000	1.1280		.2800	-.2090	.0390	.0270			.0270		-.0520				
70.000	1.1280		.1220	-.3450	-.0860	.0910			.0700		-.0980	-.0440	-.0270	-.0210	-.0930
90.000	1.1280	.6260	-.1050	-.5440	.0180	.1120			.0920		-.1950	-.0150	-.0390	-.0850	-.1640
105.000	1.1280														
110.000	1.1280														
120.000	1.1280		-.3700	-.5890	.0540	.1980			.2010		-.5480	-.0790	-.0920	-.0910	-.0870
135.000	1.1280														
142.000	1.1280									-.7860					
150.000	1.1280		-.4730	-.5900	.0870	.4010			.0170		-.9440	-.0920	-.0360	-.0410	-.1140
157.000	1.1280							.3510							
162.000	1.1280								-.1470						
165.000	1.1280										-.8950	-.0720	-.0460	.0270	-.0450
169.000	1.1280								-.2560						
172.000	1.1280						.5740								
180.000	1.1280	.1590	-.6370	-.5790	.0900	.5080			.0540		-.7740	-.0780	-.0420	.0430	-.0220

X/LB	.5873	.6626	.7390	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2770							-.2100		-.1730
40.000	.2910	.3120		.1770	.0770	-.1100	-.1870			-.2020
75.000		-.5730	-.8020	-.4270	-.4550	-.6060	-.7590	-.1780		
90.000		-.4370	-.5410	-.3640	-.5320	-.6030	-.6310	-.3770		
105.000				-.2010	-.4090	-.5940	-.6020	-.5060		
110.000									-.2660	
120.000		-.2750	-.0620	.1490	-.3370	-.6380	-.5690	-.4830	-.1540	
135.000				.2430	-.1480	-.6130	-.4910	-.3750		
150.000		-.2220	-.0550	.1460	-.1420	-.5440	-.4830	-.3670		
165.000		-.1960		.0640	.0240	-.4610	-.4150	-.2330		
180.000		-.1660	-.0600	-.0160						

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBPB10)

MACH (2) = .901 BETA (4) = 4.200

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0802	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3955	.5120
PHI															
.000	1.1250	1.0120	.4000	-.1260	.2010	.2150			.1930		.1430	.1190	.1290	.1730	.2410
25.000	1.1250		.3500	-.1310	.1800	.1970			.1850		.1220				
40.000	1.1250		.2630	-.2100	.0840	.1160			.0680		-.1270	-.1630	-.1140	.0210	.1820
55.000	1.1250		.1240	-.4250	-.0880	-.0800			-.0570		-.1380				
70.000	1.1250		-.0520	-.5870	-.1790	.0330			.0110		-.1640	-.7000	-.6090	-.2500	-.3020
90.000	1.1250	.4940	-.2620	-.6640	-.0210	.0770			.0320		-.2600	-.8610	-.4260	-.1580	-.1530
105.000	1.1250														
110.000	1.1250														
120.000	1.1250		-.4770	-.6240	.0070	.1700			.0670		-.5930	-.9630	-.3180	-.0910	-.0870
135.000	1.1250									-.9130					
142.000	1.1250								-.0380		-.6140	-.5720	-.2970	-.0690	-.0470
150.000	1.1250		-.5410	-.6000	.0470	.3510		.2630							
157.000	1.1250								-.2340						
162.000	1.1250										-.6070	-.6060	-.2890	.0370	-.0280
165.000	1.1250								-.2700						
169.000	1.1250						.5710								
172.000	1.1250								.0360		-1.0570	-.5260	-.2760	-.0480	-.0540
180.000	1.1250	.1650	-.6440	-.6170	.0600	.5200									
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	.2670							-.1970		-.1670					
40.000	.2460	.2750		.1700	.0780	-.1090	-.1930			-.2060					
70.000		-.5460	-.7080	-.4630	-.3980	-.6670	-.7690	-.2860							
90.000		-.4500	-.5580	-.5210	-.5820	-.5980	-.6690	-.4570							
105.000				-.3860	-.5070	- 5840	-.6670	-.5500							
110.000									-.2570						
120.000		-.2670	-.1700	-.2500	-.5130	-.6690	-.6110	-.5590	-.2000						
135.000				.2040	-.1320	-.5280	-.5740	-.4660							
150.000		-.2030	-.0740	.2170	-.0330	-.5130	-.5190	-.4130							
165.000		-.1750		.1050	.0560	-.4230	-.4420	-.2480							
180.000		-.2[illegible]	-.0910	-.0460											

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBPB10)

MACH (2) = .950 BETA (5) = 8.330

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0970	.9840	.0000	-.1390	.1820	.1940			.1780		.1330	.1130	.1190	.1550	.2240
25.000	1.0970		.2920	-.1740	.1400	.1660			.1510		.0920				
40.000	1.0970		.1540	-.3160	-.0080	.0120			-.0520		-.2850	-.3050	-.2330	-.0810	.1220
55.000	1.0970		-.0120	-.5910	-.2130	-.1640			-.1320		-.2130				
70.000	1.0970		-.1940	-.6890	-.3030	-.0060			-.0380		-.2120	-.7140	-.6530	-.3060	-.3430
90.000	1.0970	.3690	-.3900	-.6890	-.1820	.0540			-.0120		-.2980	-.8720	-.3690	-.1580	-.1750
105.000	1.0970														
110.000	1.0970														
120.000	1.0970		-.5770	-.5920	-.1690	.1270			-.0180		-.5200	-.8600	-.2840	-.0670	-.0970
135.000	1.0970														
142.000	1.0970									-.8230					
150.000	1.0970		-.6140	-.6520	-.0220	.3120			-.0980		-.7130	-.6040	-.3910	-.0090	-.0430
157.000	1.0970							.1750							
162.000	1.0970								-.3270						
165.000	1.0970										-.5720	-.6100	-.3490	.0060	-.0420
169.000	1.0970								-.2930						
172.000	1.0970						.5280								
180.000	1.0970	.1550	-.6490	-.6660	-.0060	.4730			.0030		-1.0300	-.5490	-.4120	-.0870	-.0980

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2500							-.1540		-.1600
40.000	.1900	.2310		.1610	.0740	-.1070	-.1910			-.2030
70.000		-.5170	-.7050	-.4590	-.4070	-.6490	-.7910	-.4400		
90.000		-.4520	-.6070	-.5400	-.6270	-.5840	-.7350	-.6410		
105.000				-.4410	-.5540	-.5860	-.7100	-.6080		
110.000									-.2510	
120.000		-.3030	-.2330	-.2800	-.5710	-.7920	-.6720	-.6400	-.2070	
135.000				.3440	-.0540	-.6660	-.6000	-.5520		
150.000		-.2050	-.0720	.1350	-.1270	-.5630	-.5470	-.4720		
165.000		-.1940		.0760	.0010	-.5060	-.4840	-.2730		
180.000		-.2260	-.0860	-.0530						

AMES 11-7ft OA12 OEA ORBITER FUSELAGE (RBPB11) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 20.000 RUDDER = -10.000
ELEVON = .000 RUDFLR = .000

MACH (1) = .598 BETA (1) = -7.990

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.7990	.9450	.6040	.1090	.2660	.2560			.2430		.2200	.2140	.2300	.2550	.2870
20.000	.7990		.6150	.2160	.2980	.2930			.2790		.2440				
40.000	.7990		.6560	.3070	.3540	.3360			.3030		.1870	.1320	.2180	.2860	.3490
55.000	.7990		.5460	.1910	.1940	.0630			.0480		-.0690				
70.000	.7990		.3330	-.0010	-.0330	.0830			.0480		-.0820	-.4360	-.3120	-.2600	-.5890
90.000	.7990	.5950	.0040	-.2260	-.0100	.0200			.0010		-.2030	-.7130	-.4490	-.3960	-.3410
105.000	.7990														
110.000	.7990														
120.000	.7990		-.4360	-.4130	-.1470	-.0190			.1890		-.7640	-.7020	-.5160	-.4780	-.4520
135.000	.7990														
142.000	.7990									-.6320					
150.000	.7990		-.6740	-.5560	-.1710	.1820			-.3610		-1.1210	-.3610	-.2680	-.2620	-.2750
157.000	.7990							.1110							
162.000	.7990								-.5520						
165.000	.7990										-.5860	-.2850	-.2450	-.2480	-.2840
169.000	.7990								-.8190						
172.000	.7990						.3450								
180.000	.7990	-.3610	-.9130	-.3400	-.1470	.2740			-.3620		-.6430	-.2540	-.3980	-.1770	-.1490

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2940							-.0010		-.1120
40.000	.3840	.3710		.1990	.1100	-.0040	-.0140			-.1150
70.000		-.9430	-.7770	-.6090	-.3840	-.3300	-.2520	-.2200		
90.000		-.6460	-.5900	-.5310	-.3980	-.3280	-.2480	-.2020		
[illegible]				-.1070	-.2910	-.2920	-.2380	-.2260		
110.000									-.2920	
120.000		-.3880	-.1070	.2540	-.1880	-.2580	-.1540	-.1170	-.1600	
135.000				-.0570	-.3640	-.4360	-.2960	-.2800		
150.000		-.2580	-.1050	-.0970	-.3980	-.2540	-.1810	-.2480		
165.000		-.2750		-.0920	-.1040	-.2200	-.1860	-.2650		
180.000		-.2130	-.1510	-.1600						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB11)

MACH (1) = .990 BETA (2) = -3.980

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.8490	1.0040	.0000	.1350	.3020	.2770			.2640		.2360	.2310	.2480	.2720	.3050
20.000	.8490		.5870	.2070	.3080	.2930			.2810		.2390				
40.000	.8490		.5590	.2180	.2820	.2650			.2160		.0570	.0020	.1200	.2140	.3060
55.000	.8490		.3920	.0380	.0620	-.0760			-.0680		-.1120				
70.000	.8490		.1520	-.1640	-.1530	-.0020			-.0240		-.1580	-.5120	-.3760	-.3230	-.6550
90.000	.8490	.4770	-.1650	-.3620	-.0860	-.0340			-.0560		-.2590	-.7570	-.4660	-.4000	-.3570
105.000	.8490														
110.000	.8490														
120.000	.8490		-.5610	-.4730	-.1390	-.0100			.1230		-.7430	-.6370	-.4390	-.3970	-.3550
135.000	.8490									-.6580					
142.000	.8490								-.3920		-.9980	-.3270	-.2510	-.2230	-.2540
150.000	.8490		-.7030	-.5830	-.1190	.2130		.1100							
157.000	.8490								-.6010						
162.000	.8490										-.5420	-.2570	-.2520	-.1450	-.2360
165.000	.8490								-.8070						
169.000	.8490						.3730								
172.000	.8490								-.3310		-.5600	-.1810	-.1610	-.1380	-.1990
180.000	.8490	-.3440	-.8840	-.3200	-.1050	.3230									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3480							-.0080		-.1230
40.000	.3550	.3540		.2080	.1220	.0030	-.0160			-.1240
70.000		-.9420	-.7520	-.6090	-.3820	-.3230	-.2310	-.2000		
90.000		-.7520	-.6860	-.6530	-.4980	-.3610	-.2510	-.2150		
105.000				-.3040	-.3980	-.3400	-.2750	-.2400		
110.000									-.3060	
120.000		-.3400	-.0940	.0840	-.3630	-.3170	-.2090	-.1700	-.2060	
135.000				.1270	-.2820	-.3670	-.2450	-.2420		
150.000		-.2460	-.0880	.0160	-.2810	-.2870	-.2210	-.2540		
165.000		-.2540		-.0690	-.0510	-.3030	-.2620	-.2630		
180.000		-.1400	-.0680	-.0700						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7X7 OA12 OEA ORBITER FUSELAGE (RBPB11)

MACH (1) = .998 BETA (3) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1956	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.8350	1.0100	.0000	.1320	.2940	.2790			.2670		.2380	.2360	.2500	.2720	.3010
20.000	.8350		.5300	.1650	.2890	.2750			.2630		.2190				
40.000	.8350		.4270	.1090	.1850	.1620			.1030		-.1110	-.1660	-.0210	.1310	.2520
55.000	.8350		.2250	-.1210	-.0580	-.2060			-.1790		-.2130				
70.000	.8350		-.0210	-.3160	-.2510	-.0700			-.0990		-.2310	-.5770	-.4290	-.3770	-.7030
90.000	.8350	.3490	-.3370	-.4680	-.1340	-.1770			-.1030		-.3000	-.7730	-.4740	-.3940	-.3750
105.000	.8350														
110.000	.8350								.0410		-.7070	-.5700	-.3550	-.3030	-.2740
120.000	.8350		-.6480	-.5530	-.1310	-.0120									
135.000	.8350									-.6840					
142.000	.8350								-.4330		-.8600	-.2890	-.2070	-.2420	-.3210
150.000	.8350		-.7400	-.5370	-.1660	.2130		.0710							
157.000	.8350								-.6700						
162.000	.8350										-.5200	-.2380	-.2170	-.0840	-.1380
165.000	.8350								-.8090						
169.000	.8350						.3710								
172.000	.8350								-.3200		-.5440	-.1650	-.1060	-.0830	-.0910
180.000	.8350	-.3210	-.8670	-.3140	-.0880	.3360									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3130							-.0140		-.1190
40.000	.3080	.3320		.2080	.1220	.0010	-.0230			-.1390
70.000		-.9000	-.7340	-.6120	-.4190	-.3380	-.2340	-.2090		
90.000		-.7950	-.7320	-.7750	-.5890	-.3840	-.2790	-.2310		
105.000				-.5390	-.4820	-.3820	-.3070	-.2700		
110.000									-.3460	
120.000		-.3110	-.1470	-.1960	-.5930	-.4110	-.2730	-.2240	-.2560	
135.000				.2190	-.2510	-.3570	-.2460	-.2350		
150.000		-.2940	-.1280	.1610	-.3090	-.4020	-.3410	-.3420		
165.000		-.1910		.0680	.0470	-.3030	-.3040	-.2800		
180.000		-.1490	-.0710	-.0770						

AMES 11-7D7 OA12 CEA ORBITER FUSELAGE (RBPB11)

MACH (1) = .900 BETA (4) = 4.190

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.8330	.9930	.0000	.1220	.2870	.2670			.2550		.2290	.2260	.2370	.2650	.2950
20.000	.8330		.4460	.1100	.2560	.2410			.2300		.1820				
40.000	.8330		.2780	-.0210	.0760	.0240			-.0590		-.3170	-.3590	-.1780	.0270	.1860
55.000	.8330		.0390	-.2940	-.2010	-.3350			-.3010		-.3160				
70.000	.8330		-.2220	-.4710	-.3550	-.1400			-.1580		-.2840	-.6220	-.4560	-.4220	-.7320
90.000	.8330	.1980	-.5190	-.5860	-.1880	-.1120			-.1430		-.3420	-.7670	-.4470	-.3720	-.3910
105.000	.8330														
110.000	.8330														
125.000	.8330		-.7700	-.6480	-.1420	-.0200			-.0480		-.6600	-.4840	-.2840	-.2290	-.2370
135.000	.8330									-.7030					
142.000	.8330														
150.000	.8330		-.7970	-.4380	-.0980	.1780			-.4840		-.7510	-.2580	-.1440	-.1500	-.2140
157.000	.8330							.0000							
162.000	.8330								-.7700						
165.000	.8330										-.5420	-.2160	-.1640	-.0790	-.1190
169.000	.8330								-.8270						
172.000	.8330						.3390								
180.000	.8330	-.3000	-.8740	-.3380	-.0950	.3150			-.3360		-.5640	-.1860	-.1650	-.1420	-.0990

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3010							-.0170		-.1270
40.000	.2540	.2920		.2030	.1280	.0040	-.0160			-.1340
70.000		-.8430	-.7020	-.6440	-.4490	-.3550	-.2250	-.1830		
90.000		-.7990	-.7730	-.8330	-.6350	-.4350	-.2760	-.2090		
105.000				-.7060	-.5820	-.4320	-.3160	-.2720		
110.000									-.3600	
125.000		-.3500	-.2140	-.5720	-.6220	-.4850	-.3280	-.2720	-.2850	
135.000				.0320	-.1850	-.3980	-.2920	-.2520		
150.000		-.2200	-.0470	.2920	-.1220	-.3970	-.3280	-.3090		
165.000		-.1600		.1000	.0470	-.3750	-.3220	-.2760		
180.000		-.1400	-.0700	-.0700						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBPB11)

MACH (1) = .800 BETA (5) = 8.310

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.8280	.9800	.0000	.1030	.2600	.2540			.2410		.2110	.2120	.2170	.2450	.2760
20.000	.8280		.3750	.0600	.2000	.1990			.1870		.1420				
40.000	.8280		.1350	-.1370	-.0460	-.1290			-.2320		-.5370	-.5500	-.3500	-.0830	.1030
55.000	.8280		-.1420	-.4420	-.3290	-.4680			-.3880		-.4640				
75.000	.8280		-.4100	-.6140	-.4360	-.1960			-.2130		-.3360	-.6540	-.5010	-.4690	-.7380
90.000	.8280	.0470	-.7060	-.7020	-.2230	-.1440			-.1780		-.3510	-.7400	-.4230	-.3500	-.4240
105.000	.8280														
110.000	.8280														
120.000	.8280		-.8820	-.7540	-.1400	-.0430			-.1120		-.6160	-.4290	-.2280	-.2120	-.2610
135.000	.8280									-.7150					
142.000	.8280								-.5450		-.6570	-.2260	-.1120	-.1660	-.1360
150.000	.8280		-.8650	-.4120	-.1200	.1300		-.1090							
157.000	.8280								-.8940						
162.000	.8280										-.5530	-.2030	-.1210	-.0880	-.1460
165.000	.8280								-.8790						
169.000	.8280						.2630								
172.000	.8280								-.3800		-.6260	-.2330	-.3960	-.1890	-.1490
180.000	.8280	-.3360	-.9030	-.3650	-.1400	.2600									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2850							-.0120		-.1150
30.000	.1860	.2450		.1930	.1240	.0110	-.0130			-.1220
70.000		-.8250	-.7140	-.6560	-.4870	-.3760	-.2400	-.1750		
90.000		-.8320	-.7750	-.8970	-.6990	-.4310	-.2910	-.2160		
105.000				-.9020	-.6610	-.4440	-.3350	-.2770		
110.000									-.3480	
120.000		-.4540	-.3700	-.6090	-1.0680	-.5860	-.4010	-.3180	-.3220	
135.000				.3390	-.2180	-.4840	-.3480	-.2920		
150.000		-.2140	-.0810	.1070	-.2690	-.4990	-.4150	-.3610		
165.000		-.2170		.0320	-.0480	-.4850	-.4230	-.2850		
[illegible]		[illegible]	-.1590	-.1520						

AMES 11-7D7 OA12 OBA ORBITER FUSELAGE (RBPB11)

MACH (2) = .903 BETA (1) = -8.060

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0025	1.0850	.0000	.1200	.3170	.3110			.2930		.2590	.2390	.2440	.2720	.3300
20.000	1.0025		.7020	.2340	.3440	.3440			.3290		.2790				
40.000	1.0025		.7420	.3330	.3960	.3910			.3680		.2540	.1970	.2490	.3040	.3920
55.000	1.0025		.6500	.2340	.2520	.1620			.1670		.1250				
75.000	1.0025		.4650	.0530	.0210	.1820			.1860		.0700	-.4610	-.3420	-.3690	-.4340
90.000	1.0025	.7710	.1630	-.2170	.0350	.1410			.1730		-.0340	-.6970	-.5920	-.4670	-.2510
105.000	1.0025														
115.000	1.0025														
125.000	1.0025		-.2790	-.5010	-.0930	.1420			.4060		-.6220	-1.0110	-.7940	-.2710	-.2890
135.000	1.0025														
142.000	1.0025									-.5080					
150.000	1.0025		-.5180	-.6960	-.1020	.3860			.0120		-1.0860	-.7410	-.5040	-.2390	-.1720
157.000	1.0025							.3980							
162.000	1.0025								-.0940						
165.000	1.0025										-.6560	-.5230	-.4940	-.1280	-.2230
169.000	1.0025								-.3730						
172.000	1.0025						.5570								
180.000	1.0025	-.0900	-.7850	-.6450	-.0980	.4290			-.0610		-1.0590	-.6910	-.3140	-.0550	-.0790

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3500							-.1020		-.1640
40.000	.4460	.4430		.2660	.1510	-.0240	-.0690			-.2220
75.000		-.8260	-1.0450	-.6480	-.8670	-.8050	-.5250	-.4760		
90.000		-.5580	-.8710	-.5040	-.7680	-.6180	-.5590	-.4130		
105.000				-.0270	-.5330	-.5610	-.5350	-.3890		
115.000									-.3990	
120.000		-.4710	-.1740	.4160	-.2070	-.5700	-.4600	-.2200	-.2650	
135.000				.0170	-.3360	-.9130	-.6340	-.2340		
150.000		-.3000	-.0960	-.0600	-.3520	-.6500	-.3420	-.2460		
165.000		-.2890		-.0330	-.1080	-.5990	-.3540	-.3020		
180.000		-.3030	-.1740	-.0680						

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBPB11)

MACH (2) = .900 BETA (2) = -3.980

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0270	1.2190	.0000	.1450	.3390	.3330			.3120		.2740	.2560	.2670	.2820	.3460
20.000	1.0270		.6740	.2180	.3520	.3490			.3320		.2820				
40.000	1.0270		.6460	.2440	.3290	.3340			.3000		.1470	.0990	.1610	.2420	.3630
55.000	1.0270		.5100	.0740	.1200	.0340			.0570		.0290				
70.000	1.0270		.3010	-.1190	-.1060	.1080			.1090		.0000	-.5590	-.4280	-.4020	-.5750
90.000	1.0270	.6580	-.0020	-.4030	-.0290	.0910			.1210		-.1060	-.7720	-.6600	-.2160	-.2360
105.000	1.0270														
110.000	1.0270														
120.000	1.0270		-.4010	-.6350	-.0810	.1560			.3250		-.6720	-1.0060	-.4470	-.1700	-.1480
135.000	1.0270														
142.000	1.0270									-.6280					
150.000	1.0270		-.5870	-.6410	-.0500	.4030			.0070		-1.0610	-.6300	-.4930	-.2840	-.1630
157.000	1.0270							.4050							
162.000	1.0270								-.1220						
165.000	1.0270										-.7870	-.4430	-.4800	-.0240	-.1750
169.000	1.0270								-.3480						
172.000	1.0270						.5700								
180.000	1.0270	-.0400	-.6750	-.5270	-.1340	.4340			-.0190		-.9530	-.5660	-.2230	-.0130	-.0630

X/LB	.5873	.6626	.7380	.7869	.9283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3700							-.0970		-.1770
40.000	.4130	.4300		.2840	.1740	-.0070	-.0800			-.2460
70.000		-.6330	-.9920	-.6210	-.6230	-.6100	-.5180	-.4920		
90.000		-.6870	-.9100	-.6690	-.9360	-.7120	-.5310	-.4010		
105.000				-.2580	-.[illegible]	-.6970	-.4640	-.3870		
110.000									-.3990	
120.000		-.3500	-.1180	.2850	-.2820	-.7060	-.5120	-.2440	-.3160	
135.000				.2150	-.2380	-.7780	-.5920	-.2130		
150.000		-.2770	-.1120	.0110	-.2260	-.6550	-.4730	-.2670		
165.000		-.3110		.0070	-.0870	-.6370	-.4420	-.2850		
180.000		-.2820	-.1400	-.0760						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (R9FB11)

MACH (2) = .900 BETA (3) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.0390	1.1800	.0000	.1370	.3430	.3380			.3150		.2770	.2590	.2870	.2890	.3330
25.000	1.0390		.0190	.1780	.3400	.3320			.3220		.2650				
40.000	1.0390		.5320	.1300	.2420	.2460			.2000		.0060	-.0330	.0500	.1630	.3090
55.000	1.0390		.3640	-.0830	-.0180	-.0690			-.0450		-.0650				
75.000	1.0390		.1380	-.2930	-.2110	.0430			.0530		-.0690	-.6240	-.5290	-.2660	-.0830
90.000	1.0390	.9510	-.1470	-.5060	-.0680	.0600			.0910		-.1790	-.8250	-.7510	-.2180	-.2570
105.000	1.0390														
115.000	1.0390														
125.000	1.0390		-.4910	-.6720	-.0500	.1580			.2480		-.6660	-1.0350	-.4660	-.1540	-.1220
135.000	1.0390														
142.000	1.0390									-.7420					
150.000	1.0390		-.6310	-.5520	-.0750	.3580			-.0160		-1.0280	-.6260	-.3920	-.1350	-.2260
157.000	1.0390							.3240							
162.000	1.0390								-.1540						
165.000	1.0390										-.8590	-.4820	-.3980	.0350	-.0760
169.000	1.0390								-.2830						
172.000	1.0390						.4300								
180.000	1.0390	-.0210	-.5970	-.4790	-.1210	.3740			-.0690		-.8060	-.9310	-.1490	.0180	-.0310

X/LB	.5873	.6626	.7380	.7880	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3800							-.1040		-.1750
40.000	.3740	.4100		.2840	.1820	.0420	-.0760			-.2490
75.000		-.7340	-.9420	-.5910	-.5730	-.5190	-.4880	-.4890		
90.000		-.6780	-.9230	-.8150	-.9390	-.5760	-.4980	-.4270		
105.000				-.4150	-.6100	-.7780	-.4220	-.4150		
115.000									-.4330	
125.000		-.2920	-.1990	-.0110	-.3820	-.8060	-.4230	-.3570	-.3640	
135.000				.2380	-.1980	-.6800	-.5720	-.2780		
150.000		-.2910	-.1280	.1480	-.1620	-.6310	-.5060	-.3570		
165.000		-.2790		.0360	.0230	-.5380	-.5060	-.2980		
180.000		-.2310	-.1170	-.0620						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB11)

MACH (2) = .900 BETA (4) = 4.230

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0080	1.1050	.0000	.1260	.3370	.3230			.3160		.2680	.2500	.2590	.2890	.3430
25.000	1.0080		.5500	.1260	.3000	.2970			.2850		.2400				
40.000	1.0080		.4070	.1060	.1350	.1230			.0530		-.1760	-.1910	-.0730	.0570	.2460
55.000	1.0080		.2110	-.2550	-.1750	-.2170			-.1450		-.1630				
70.000	1.0080		-.0190	-.4660	-.2960	-.0150			-.0690		-.1350	-.6700	-.6140	-.3180	-.6830
90.000	1.0080	.4410	-.2920	-.6970	-.1350	.0340			.0290		-.2260	-.8470	-.7560	-.1850	-.2850
105.000	1.0080														
110.000	1.0080														
120.000	1.0080		-.5920	-.6360	-.1010	.1550			.1310		-.6470	-.9520	-.4410	-.1620	-.1430
135.000	1.0080														
142.000	1.0080									-.7640					
150.000	1.0080		-.6820	-.5190	-.1260	.2900			-.0790		-.9940	-.5830	-.2360	-.1050	-.0950
157.000	1.0080							.2010							
162.000	1.0080								-.2690						
165.000	1.0080										-.8280	-.4960	-.2600	.0240	-.0510
169.000	1.0080								-.3030						
172.000	1.0080						.4470								
180.000	1.0080	.0130	-.6600	-.5470	-.0770	.4340			-.0300		-.8600	-.5410	-.2310	-.0380	-.0740

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3710							-.1050		-.1740
40.000	.3200	.3630		.2780	.1840	.0050	-.0790			-.2470
70.000		-.7070	-.8940	-.6570	-.6050	-.4020	-.4830	-.4760		
90.000		-.7050	-.8890	-.9040	-1.0230	-.4210	-.4250	-.4300		
105.000				-.5770	-.7230	-.6150	-.4010	-.4750		
110.000									-.4100	
120.000		-.3410	-.2400	-.3060	-.5360	-.8400	-.3140	-.3740	-.4050	
135.000				.1160	-.1890	-.6350	-.5350	-.3190		
150.000		-.3190	-.1910	.2750	-.1230	-.5610	-.5540	-.4820		
165.000		-.2480		.1160	.1120	-.3510	-.3870	-.3320		
180.000		-.2700	-.1390	-.0750						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB11)

MACH (2) = .901 BETA (5) = 8.360

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.0060	1.0810	.4000	.1240	.3220	.3050			.2960		.2530	.2400	.2400	.2710	.3250
20.000	1.0060		.4890	.0860	.2590	.2600			.2510		.2010				
40.000	1.0060		.2970	-.0910	.0270	-.0110			-.0990		-.3860	-.4050	-.2130	-.0480	.1690
55.000	1.0060		.0750	-.4080	-.3100	-.3450			-.2340		-.2880				
70.000	1.0060		-.1670	-.6310	-.4730	-.0560			-.0570		-.1940	-.7090	-.7080	-.3620	-.6460
90.000	1.0060	.3120	-.4260	-.6970	-.2550	.0280			-.0070		-.2750	-.8790	-.7570	-.1810	-.3270
105.000	1.0060														
110.000	1.0060														
125.000	1.0060		-.6770	-.5560	-.2510	.1230			.0200		-.6020	-1.0190	-.3850	-.1850	-.1870
135.000	1.0060														
142.000	1.0060									-.8650					
150.000	1.0060		-.7290	-.5650	-.1690	.2690			-.1140		-.6650	-.6110	-.2680	-.0190	-.0670
157.000	1.0060							.1650							
162.000	1.0060								-.3450						
165.000	1.0060										-.6180	-.6240	-.2730	.0230	-.0460
169.000	1.0060								-.3440						
172.000	1.0060						.4710								
180.000	1.0060	-.0280	-.7890	-.6380	-.0740	.4210			-.0680		-.9610	-.6210	-.3420	-.0690	-.0810

X/LB	.5877	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3520							-.1090		-.1680
40.000	.2570	.3110		.2590	.1780	.0010	-.0830			-.2330
70.000		-.6700	-.8480	-.6480	-.5770	-.4310	-.5720	-.4180		
90.000		-.7160	-.8810	-.9450	-1.0610	-.3380	-.4140	-.3780		
105.000				-.7170	-.7550	-.5890	-.4300	-.4470		
110.000									-.4310	
125.000		-.4270	-.3680	-.5320	-.6380	-.8530	-.5320	-.3640	-.4010	
135.000				.3300	-.0100	-.6600	-.6130	-.3880		
150.000		-.2710	-.1410	.1830	-.1050	-.5420	-.5430	-.5330		
165.000		-.2430		.0890	.0110	-.4590	-.4660	-.3270		
180.000		-.2960	-.1590	-.0900						

AMES 11-7D7 OA12 O2A ORBITER FUSELAGE (RBPB12) (01 MAY 73)

REFERENCE DATA

SREF = 2.421 SQ.FT. XMRP = 28.530 INCHES
LREF = 39.849 INCHES YMRP = .000 INCHES
BREF = 39.849 INCHES ZMRP = .000 INCHES
SCALE = .030 SCALE

PARAMETRIC DATA

ALPHA = .00 RUDDER = -20.00
ELEVON = .00 RUDFLR = .00

MACH (1) = .599 BETA (1) = -7.97

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.00	1.0370	.3430	.0000	-.7340	-.1370	-.0630			-.0710		-.0780	-.0670	-.0450	-.0340	-.0240
20.00	1.0370		-.3710	-.6570	-.2110	-.0980			-.1010		-.1070				
40.00	1.0370		-.0730	-.4330	-.1750	-.2430			-.2530		-.2740	-.2030	-.1320	-.0790	-.0350
55.00	1.0370		.1120	-.2120	.0380	.0620			.0460		-.0170				
75.00	1.0370		.2080	-.0870	.1130	.1280			.0810		-.0320	-.2860	-.0220	.0430	.0220
90.00	1.0370	.8180	.2470	-.0130	.1640	.1510			.0880		-.0540	-.3440	-.0360	.0220	.0130
105.00	1.0370														
110.00	1.0370														
120.00	1.0370		.2670	.1030	.2410	.2500			.1350		-.1690	-.2380	-.0680	-.0220	-.0120
135.00	1.0370									-.2840					
142.00	1.0370														
150.00	1.0370		.1990	.1100	.2490	.4420			.0330		-.5070	-.1700	-.0870	-.0470	-.0290
157.00	1.0370							.4050							
162.00	1.0370								-.0810						
165.00	1.0370										-.3660	-.1430	-.0250	-.0290	-.0170
169.00	1.0370								-.2150						
172.00	1.0370						.5950								
180.00	1.0370	.5490	-.0360	.0380	.1370	.4650			.0870		-.5640	-.2240	-.2030	-.2030	-.1470

X/LB	.5675	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.00	-.0330							-.1150		-.1640
40.00	-.0510	-.1230		-.1790	-.2090	-.2120	-.1450			-.1500
75.00		-.0770	-.0720	-.0190	.0970	.0310	.0300	-.0310		
90.00		-.0410	.0090	.0610	.0770	-.0100	-.0210	-.0570		
				.1410	.0370	-.0280	-.0450	-.0820		
110.00									-.1800	
120.00		-.0250	.1310	.3320	-.0730	-.0810	-.0330	-.0480	-.1240	
135.00				.2920	-.0010	-.1260	-.0650	-.1170		
150.00		-.0100	.1030	.1250	-.1040	-.0670	-.0580	-.1610		
165.00		.0100		.1630	.1340	.0180	-.0480	-.2080		
180.00		-.1540	-.0580	-.0240						

AMES 11-7ft OA12 OEA ORBITER FUSELAGE (RBPB12)

MACH (1) = .60 BETA (2) = -3.93

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0750	.3860	.0000	-.7240	-.1110	-.0460			-.0570		-.0650	-.0580	-.0350	-.0230	-.0060
20.000	1.0750		-.3820	-.6390	-.1500	-.0670			-.0680		-.0850				
40.000	1.0750		-.1510	-.4650	-.1300	-.1450			-.1520		-.1830	-.1480	-.0740	-.0440	-.0150
55.000	1.0750		-.0290	-.3150	-.0150	.0200			-.0650		-.0590				
70.000	1.0750		.0260	-.2220	.0160	.0560			.0080		-.0940	-.0460	-.0630	.0010	-.0090
90.000	1.0750	.6820	.0550	-.1710	.0720	.0690			-.0640		-.1330	-.0830	-.0710	-.0080	-.0070
105.000	1.0750														
110.000	1.0750														
120.000	1.0750		.1110	-.0190	.1550	.1570			-.0100		-.2170	-.2640	-.0860	-.0290	-.0110
135.000	1.0750									-.3670					
142.000	1.0750														
150.000	1.0750		.1110	.0630	.2030	.3930			-.0570		-.4910	-.1770	-.0870	-.0430	-.0220
157.000	1.0750							.3200							
162.000	1.0750								-.1730						
165.000	1.0750										-.4180	-.1530	-.0760	-.0370	-.0240
169.000	1.0750								-.2420						
172.000	1.0750						.6200								
180.000	1.0750	.5740	-.0180	.0570	.1710	.5210			.1240		-.5330	-.1670	-.1550	-.0740	-.0500

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0270							-.1200		-.1630
40.000	-.0240	-.1000		-.1630	-.1940	-.2120	-.1510			-.1540
70.000		-.1180	-.1230	-.0860	.0280	-.0240	-.0140	-.0580		
90.000		-.0700	-.0400	-.0230	-.0040	-.0670	-.0600	-.0860		
105.000				.0340	-.0590	-.0940	-.0840	-.1190		
110.000									-.1940	
120.000		-.0320	.1150	.1910	-.2170	-.1450	-.0760	-.0870	-.1480	
135.000				.3660	-.0060	-.1660	-.0970	-.1330		
150.000		-.0040	.1220	.1830	-.0400	-.1340	-.1190	-.1960		
165.000		.0020		.1800	.1370	-.0700	-.1290	-.2150		
180.000		-.0380	.0380	.0790						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBPB12)

MACH (1) = .599 BETA (3) = .100

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0860	.3830	.0000	-.7070	-.1030	-.0360			-.0430		-.0580	-.0460	-.0270	-.0130	-.0090
20.000	1.0860		-.4250	-.6330	-.1270	-.0480			-.0470		-.0710				
40.000	1.0860		-.2730	-.5000	-.1170	-.0790			-.0920		-.1380	-.1030	-.0420	-.0160	.0040
55.000	1.0860		-.1870	-.4130	-.0510	-.0070			-.0350		-.0980				
75.000	1.0860		-.1460	-.3420	-.0470	.0000			-.0470		-.1440	-.3770	-.0960	-.0090	-.0220
90.000	1.0860	.5540	-.1260	-.3060	-.0100	-.0020			-.0670		-.1710	-.4230	-.0900	-.0210	-.0200
105.000	1.0860														
110.000	1.0860														
120.000	1.0860		-.0330	-.1330	.0680	.0620			-.1410		-.2470	-.2710	-.0810	-.0290	-.0150
135.000	1.0860									-.4420					
142.000	1.0860								-.1570		-.4560	-.1730	-.0780	-.0370	-.0180
150.000	1.0860		.0440	.0100	.1610	.3260		.2060							
157.000	1.0860								-.2840						
162.000	1.0860										-.4300	-.1480	-.0770	-.0310	-.0210
165.000	1.0860								-.2720						
169.000	1.0860						.6030								
172.000	1.0860								.1450		-.5070	-.1420	-.0970	-.0430	-.0110
180.000	1.0860	.5940	.0070	.0720	.1980	.5430									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0302
PHI										
.000	-.0140							-.1190		-.1620
40.000	.0020	-.0680		-.1370	-.1740	-.1950	-.1490			-.1620
75.000		-.1280	-.1600	-.1400	-.0340	-.0680	-.0480	-.0710		
90.000		-.0860	-.0760	-.0910	-.0830	-.1090	-.0940	-.1040		
105.000				-.0800	-.1450	-.1380	-.1190	-.1370		
110.000									-.2160	
120.000		-.0310	.0080	.0260	-.3800	-.2060	-.1210	-.1150	-.1710	
135.000				.4120	-.0560	-.2280	-.1510	-.1580		
150.000		.0030	.1260	.2500	.0090	-.2070	-.1900	-.2210		
157.000		.0050		.2080	.1370	-.1630	-.2060	-.2040		
180.000		.0080	.0870	.1240						

AMES 11-7D7 OA12 OBA ORBITER FUSELAGE (RBPB12)

MACH (1) = .801 BETA (4) = 4.210

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3266	.3953	.5120
PHI															
.000	1.0730	.3680	.0000	-.7260	-.1130	-.0490			-.0520		-.0680	-.0560	-.0350	-.0250	-.0170
20.000	1.0730		-.4840	-.6630	-.1220	-.0460			-.0470		-.0750				
40.000	1.0730		-.3920	-.5580	-.1150	-.0540			-.0680		-.1290	-.0980	-.0420	-.0250	.0000
55.000	1.0730		-.3490	-.5180	-.0930	-.0450			-.0750		-.1270				
70.000	1.0730		-.3370	-.4720	-.1130	-.0550			-.0980		-.1790	-.4000	-.1030	-.0270	-.0360
90.000	1.0730	.3980	-.3310	-.4470	-.0910	-.0750			-.1430		-.2170	-.4330	-.0970	-.0310	-.0240
105.000	1.0730														
110.000	1.0730														
120.000	1.0730		-.2030	-.2630	-.0380	-.0500			-.2920		-.2820	-.2860	-.1080	-.0390	-.0200
135.000	1.0730														
142.000	1.0730									-.6030					
150.000	1.0730		-.0540	-.0720	.0820	.2200			-.2720		-.4420	-.1870	-.0960	-.0510	-.0210
157.000	1.0730							.0510							
162.000	1.0730								-.4330						
165.000	1.0730										-.4280	-.1560	-.0970	-.0500	-.0480
169.000	1.0730								-.3370						
172.000	1.0730						.5450								
180.000	1.0730	.3870	-.0100	.0560	.1770	.5170			.1130		-.5260	-.1620	-.1260	-.0660	-.0430

X/LB	.5873	.6626	.7380	.7659	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0260							-.1180		-.1650
40.000	.0020	-.0580		-.1280	-.1640	-.1910	-.1520			-.1700
75.000		-.1560	-.1950	-.1950	-.1970	-.1180	-.0860	-.1020		
90.000		-.1000	-.1190	-.1680	-.1510	-.1540	-.1320	-.1380		
105.000				-.1740	-.2320	-.1900	-.1560	-.1660		
110.000									-.2400	
120.000		-.0490	.0480	-.1600	-.5580	-.2770	-.1700	-.1570	-.2540	
135.000				.3980	-.1570	-.3600	-.2400	-.2130		
150.000		-.0150	.1000	.3040	.0360	-.2980	-.2540	-.2560		
165.000		-.0300		.1990	.1320	-.3010	-.2750	-.2110		
180.000		-.0230	.0550	.1000						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB12)

MACH (1) = .398 BETA (5) = 8.350

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0350	.3370	.0000	-.7420	-.1360	-.0690			-.0650		-.0830	-.0640	-.0420	-.0410	-.0280
20.000	1.0350		-.5510	-.6920	-.1250	-.0600			-.0580		-.0830				
40.000	1.0350		-.5200	-.6220	-.1310	-.0570			-.0780		-.1480	-.1250	-.0610	-.0370	-.0090
55.000	1.0350		-.5180	-.6340	-.1330	-.0760			-.1060		-.1560				
70.000	1.0350		-.5270	-.6120	-.1630	-.0820			-.1380		-.2020	-.4030	-.1060	-.0380	-.0350
90.000	1.0350	.2190	-.5240	-.5730	-.1580	-.1360			-.1980		-.2400	-.4210	-.0960	-.0350	-.0270
105.000	1.0350														
110.000	1.0350														
120.000	1.0350		-.3710	-.3930	-.1410	-.1620			-.4430		-.3000	-.2890	-.1060	-.0540	-.0290
135.000	1.0350									-.8730					
142.000	1.0350														
150.000	1.0350		-.1630	-.1680	-.0160	.0910			-.3920		-.4420	-.2050	-.1220	-.0650	-.0260
157.000	1.0350							-.1430							
162.000	1.0350								-.6070						
165.000	1.0350										-.4840	-.1740	-.1250	-.1230	-.1070
169.000	1.0350								-.4060						
172.000	1.0350						.4450								
180.000	1.0350	.5600	-.0320	.0240	.1350	.4550			.0600		-.5680	-.2090	-.1770	-.1750	-.1670

X/LB	.5873	.6626	.7380	.7869	.8283	.8648	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0360							-.1200		-.1680
40.000	-.0060	-.0330		-.1090	-.1470	-.1800	-.1500			-.1760
70.000		-.1660	-.2270	-.2450	-.1340	-.1540	-.1070	-.1190		
90.000		-.1130	-.1530	-.2240	-.1990	-.1960	-.1620	-.1540		
105.000				-.2590	-.3040	-.2430	-.1960	-.1870		
110.000									-.2420	
120.000		-.0730	-.0110	-.3070	-.7250	-.3490	-.2200	-.1980	-.2310	
135.000				.3850	-.2500	-.5060	-.3450	-.2900		
150.000		-.0680	.0200	.1860	.0080	-.4020	-.3470	-.3090		
165.000		-.1410		.1410	.0650	-.4830	-.4000	-.2350		
180.000		-.1450	-.0830	-.0390						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB12)

MACH (2) = .901 BETA (1) = -8.090

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0040	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1460	.5820	.1000	-.7230	-.2900	-.0410			-.0730		-.1470	-.1410	-.0780	-.0190	.0060
20.000	1.1460		-.1170	-.7950	-.2360	-.0810			-.1040		-.1780				
40.000	1.1460		.1190	-.5610	-.2140	-.243			-.2810		-.3770	-.4260	-.1500	-.0690	-.0070
55.000	1.1460		.2520	-.2710	.0470	.0910			.0580		-.0390				
70.000	1.1460		.3220	-.1330	.1260	.1760			.1050		-.0370	-.0210	-.0070	.0630	.0530
90.000	1.1460	.9430	.3420	-.0450	.2080	.2140			.1230		-.0470	-.7450	-.0060	.0480	.0370
105.000	1.1460														
110.000	1.1460														
120.000	1.1460		.3320	.0970	.2880	.3440			.1950		-.1470	-.8040	.0070	.0670	.0150
135.000	1.1460														
142.000	1.1460									-.4460					
150.000	1.1460		.2540	.1190	.2860	.5690			.2600		-.5730	-.5930	-.0270	-.0110	.0110
157.000	1.1460							.0740							
162.000	1.1460								.1510						
165.000	1.1460										-.5320	-.5070	.3110	.0100	.0220
169.000	1.1460								-.0190						
172.000	1.1460						.7640								
180.000	1.1460	.7110	.0150	.0420	.1840	.6170			.2890		-1.0830	-.5000	-.2470	-.1090	-.1390

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0110							-.1150		-.1520
40.000	.0030	-.0980		-.1880	-.3020	-.4130	-.1700			-.1640
70.000		-.0580	-.1230	-.0460	.0750	.0330	.0640	.0310		
90.000		-.0250	-.0240	.0680	.0290	-.0150	.0270	.0170		
105.000				.1620	-.0300	-.0410	.0020	-.0130		
110.000									-.2000	
120.000		-.0240	.1330	.3970	-.1650	-.0850	.0150	.0070	-.1340	
135.000				.3910	.0330	-.0920	.0030	-.0430		
150.000		-.0060	.1450	.1940	-.0750	-.0190	.0240	-.1050		
165.000		.0220		.2370	.1720	.0650	.0350	-.2250		
180.000		-.0940	.0280	.0660						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7D7 OA12 02A ORBITER FUSELAGE (RBPB12)

MACH (2) = .900 BETA (2) = -4.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1740	.6040	.0000	-.6380	-.3320	-.0210			-.0650		-.1230	-.1330	-.0530	-.0070	.0240
20.000	1.1740		-.1370	-.6910	-.1910	-.0440			-.0780		-.1410				
40.000	1.1740		.0350	-.6950	-.1360	-.1320			-.1770		-.2580	-.3200	-.0750	-.0240	.0250
55.000	1.1740		.1200	-.4980	.0050	.0540			.0000		-.0860				
70.000	1.1740		.1540	-.3470	.0470	.1480			.0220		-.1030	-.6630	-.0230	.0350	.0250
90.000	1.1740	.8270	.1560	-.2430	.1070	.1340			.0200		-.1320	-.7810	-.0290	.0300	.0240
105.000	1.1740														
110.000	1.1740														
120.000	1.1740		.1760	-.0440	.1970	.2630			.0590		-.1940	-.8370	-.0130	.0120	.0250
135.000	1.1740									-.7620					
142.000	1.1740								.2040		-.5770	-.5790	-.0280	.0020	.0130
150.000	1.1740		.1610	.0510	.2530	.5320		.5060							
157.000	1.1740								.0870						
162.000	1.1740										-.8180	-.4390	.1520	.0130	.0080
165.000	1.1740								-.0110						
169.000	1.1740						.7840								
172.000	1.1740										-1.1730	-.3220	-.1530	-.0200	-.0090
180.000	1.1740	.7020	.0120	.0580	.2220	.6650			.3110						

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0220							-.0990		-.1400
40.000	.0350	-.0630		-.1670	-.2700	-.3850	-.2600			-.1520
70.000		-.0870	-.1530	-.1460	-.0490	-.0880	.0100	-.0150		
90.000		-.0490	-.0470	-.0380	-.1090	-.1280	-.0290	-.0310		
105.000				.0380	-.1860	-.1580	-.0500	-.0570		
110.000									-.2200	
120.000		-.0230	.1270	.2330	-.3450	-.1890	-.0460	-.0480	-.1600	
135.000				.4290	.0190	-.1920	-.0590	-.0910		
150.000		.0010	.1520	.2570	-.0040	-.1360	-.0640	-.1680		
165.000		.0130		.2440	.1730	-.0700	-.0700	-.2290		
180.000		-.0290	.0040	.1460						

AMES 11-7D7 OA12 OBA ORBITER FUSELAGE (RBPB12)

MACH (2) = .910 BETA (3) = .100

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.2150	.6630	.0000	-.6100	-.3410	-.0110			-.0540		-.1110	-.1240	-.0450	-.0010	.0310
25.000	1.2150		-.1780	-.6950	-.2330	-.0230			-.0580		-.1270				
40.000	1.2150		-.0640	-.7600	-.0970	-.0670			-.1150		-.2100	-.2500	-.0450	-.0060	.0390
55.000	1.2150		-.0090	-.7030	-.0120	.0230			-.0510		-.1500				
70.000	1.2150		-.0010	-.5910	.0240	.0510			-.0490		-.1920	-.6890	-.0490	.0250	.0110
90.000	1.2150	.7040	-.0110	-.4910	.0350	.0640			-.0640		-.2340	-.7940	-.0660	.0220	.0130
105.000	1.2150														
115.000	1.2150														
120.000	1.2150		.0460	-.1990	.1570	.1750			-.0760		-.3760	-.8690	-.0680	.0180	.0260
135.000	1.2150														
142.000	1.2150									-1.0670					
150.000	1.2150		.0840	-.0150	.2060	.4680			.1390		-.7550	-.4460	-.0290	.0110	.0180
157.000	1.2150							.4050							
162.000	1.2150								.0650						
165.000	1.2150										-.8690	-.4260	.0670	.0240	.0120
169.000	1.2150								-.0150						
172.000	1.2150						.7680								
180.000	1.2150	.7040	.0180	.0700	.2400	.6780			.3240		-1.1570	-.2730	-.0160	.0020	.0150

X/LB	.5873	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0270							-.1000		-.1380
40.000	.0590	-.0350		-.1480	-.2380	-.3570	-.2780			-.1540
70.000		-.0920	-.1560	-.1960	-.1470	-.3120	-.0510	-.0420		
90.000		-.0490	-.0580	-.1100	-.2280	-.4060	-.0680	-.0580		
105.000				-.0680	-.3070	-.4440	-.0990	-.0910		
115.000									-.2350	
120.000		-.0100	.1150	.0750	-.4770	-.4840	-.1010	-.0950	-.1750	
135.000				.4510	-.0110	-.9000	-.1610	-.1540		
150.000		.0150	.1510	.3150	.0520	-.3450	-.1920	-.2270		
165.000		.0180		.2650	.1710	-.2360	-.2060	-.2270		
180.000		.0180	.1190	.1740						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7ft OA12 CEA ORBITER FUSELAGE (RBFD12)

MACH (2) = .900 BETA (4) = 4.200

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2660	.5820	.0000	-.6290	-.3360	-.0190			-.0580		-.1330	-.1170	-.0530	-.0070	.0210
25.000	1.2660		-.2260	-.6950	-.3060	-.0190			-.0530		-.1400				
40.000	1.2660		-.1610	-.7620	-.0680	-.0280			-.0780		-.2210	-.2160	-.0480	.0030	.0370
55.000	1.2660		-.1440	-.8190	.0060	-.0050			-.0810		-.2540				
70.000	1.2660		-.1950	-.7560	.0170	.0050			-.1000		-.3450	-.7050	-.0650	.0150	.0040
90.000	1.2660	.5670	-.1580	-.7070	-.0140	.0000			-.1330		-.4130	-.8000	-.0630	.0130	.0170
105.000	1.2660														
110.000	1.2660														
120.000	1.2660		-.0980	-.4090	.0140	.0730			-.2120		-.5520	-.7090	-.0490	.0070	.0220
135.000	1.2660									-1.1640					
142.000	1.2660								.0530		-.7180	-.4620	-.0570	.0190	.0220
150.000	1.2660		.0040	-.1190	.1340	.3760		.2710							
157.000	1.2660								-.1050						
162.000	1.2660										-.8710	-.4870	-.0220	.0170	-.0060
165.000	1.2660								-.0970						
169.000	1.2660						.7140								
172.000	1.2660								.3040		-1.1350	-.4130	-.0820	-.0230	-.0120
180.000	1.2660	.7080	.0290	.0560	.2360	.6660									

X/LB	.5073	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1240							-.0990		-.1420
40.000	.0560	-.0170		-.1380	-.2250	-.3400	-.2990			-.1690
70.000		-.0880	-.1540	-.2280	-.2130	-.4550	-.2110	-.0800		
90.000		-.0480	-.0640	-.1680	-.2980	-.4900	-.3000	-.0990		
105.000				-.1420	-.4200	-.5020	-.3190	-.1250		
110.000									-.2430	
120.000		-.0130	.0920	-.0710	-.3960	-.5600	-.4770	-.1270	-.2040	
135.000				.4650	-.0400	-.6570	-.4640	-.2170		
150.000		.0110	.1320	.3060	.0090	-.4210	-.4390	-.2960		
165.000		-.0050		.2540	.1610	-.3760	-.3880	-.2350		
180.000		-.0190	.0930	.1430						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB12)

MACH (2) = .903 BETA (5) = 8.450

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1740	.5580	.0000	-.7090	-.3220	-.0390			-.0720		-.1610	-.1410	-.0720	-.0210	.0000
20.000	1.1740		-.2760	-.7120	-.3310	-.0250			-.0680		-.1640				
40.000	1.1740		-.2560	-.7090	-.2800	-.0260			-.0770		-.2510	-.2580	-.0770	-.0170	.0230
55.000	1.1740		-.2790	-.7130	-.2410	-.0280			-.1560		-.3030				
70.000	1.1740		-.3020	-.7070	-.2230	-.0270			-.1360		-.4300	-.7760	-.0780	.0130	.0060
90.000	1.1740	.4280	-.3150	-.7000	-.1170	-.0570			-.1950		-.5130	-.7470	-.0860	.0160	.0190
105.000	1.1740														
110.000	1.1740														
125.000	1.1740		-.2260	-.5880	-.1580	-.0480			-.3390		-.6800	-.5720	-.1580	.0130	.0120
135.000	1.1740														
142.000	1.1740									-1.2990					
150.000	1.1740		-.1800	-.2250	.0340	.2590			-.0530		-.7330	-.5570	-.1640	.0190	-.0260
157.000	1.1740							.1090							
162.000	1.1740								-.2180						
165.000	1.1740										-.7390	-.5940	-.1120	-.0530	-.0640
169.000	1.1740								-.0740						
172.000	1.1740						.6220								
180.000	1.1740	.8940	.0240	.0270	.1870	.6020			.2640		-.9240	-.6040	-.1820	-.1130	-.1110

X/LB	.5873	.6828	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0440							-.1210		-.1670
40.000	.0430	-.0190		-.1280	-.2160	-.3230	-.3900			-.2070
70.000		-.0850	-.1510	-.2410	-.2410	-.5150	-.3760	-.1350		
90.000		-.0480	-.0680	-.1900	-.3420	-.5270	-.5620	-.1490		
105.000				-.1800	-.4810	-.5440	-.5790	-.1890		
110.000									-.2620	
125.000		-.0190	.0750	-.1110	-.6720	-.6190	-.5650	-.3080	-.2250	
135.000				.4910	-.0270	-.7690	-.6890	-.5710		
150.000		-.0670	.0430	.1500	.0070	-.4480	-.5590	-.4660		
165.000		-.0700		.1730	.1330	-.4640	-.5120	-.2960		
170.000		-.0920	.0320	.0910						

AMES 11-7U? OA12 O2A ORBITER FUSELAGE (RBPB13) (01 MAY 73)

REFERENCE DATA

SREF = 2.421U 3U.FT. XMRP = 28.53UU INCHES
LREF = 39.84U INCHES YMRP = .UUUU INCHES
BREF = 39.84U INCHES ZMRP = .UUUU INCHES
SCALE = .U3UU SCALE

PARAMETRIC DATA

ALPHA = 5.UUU RUDDER = -2U.UUU
ELEVON = .UUU RUDFLR = .UUU

MACH (1) = .599 BETA (1) = -8.U3U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.UUUU	.UU75	.U188	.U339	.U6U2	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.32U4	.3953	.512U
PHI															
.UUU	1.U39U	.548U	.UUUU	-.522U	-.U61U	-.U64U			-.U16U		-.U32U	-.U29U	-.UU8U	.U11U	.U32U
2U.UUU	1.U39U		-.U87U	-.432U	-.U85U	-.U18U			-.U22U		-.U42U				
4U.UUU	1.U39U		.15UU	-.227U	-.U6U	-.U46U			-.U55U		-.U88U	-.U55U	-.UU5U	.U23U	.U64U
55.UUU	1.U39U		.26U	-.U79U	.125U	.138U			.1U7U		.U26U				
7U.UUU	1.U39U		.279U	-.U24U	.14U	.151U			.1UUU		-.U22U	-.3U9U	-.U7UU	-.U13U	-.U7U
9U.UUU	1.U39U	.812U	.222U	-.U34U	.173U	.16U			.1UU		-.U68U	-.4UU	-.U95U	-.U47U	-.U83U
1U5.UUU	1.U39U														
11U.UUU	1.U39U														
12U.UUU	1.U39U		.112U	-.U1U	.176U	.216U			.166U		-.281U	-.32U	-.14U	-.1U5U	-.113U
135.UUU	1.U39U														
142.UUU	1.U39U									-.377U					
15U.UUU	1.U39U		-.U2UU	-.U43U	.126U	.377U			-.U74U		-.662U	-.23U	-.134U	-.U97U	.U9U
157.UUU	1.U39U							.329U							
162.UUU	1.U39U								-.221U						
165.UUU	1.U39U										-.433U	-.187U	-.136U	-.U74U	-.U75U
169.UUU	1.U39U								-.393U						
172.UUU	1.U39U						.527U								
18U.UUU	1.U39U	.346U	-.266U	-.1U7U	.U41U	.414U			-.U38U		-.616U	-.251U	-.222U	-.331U	-.188U

X/LB	.5873	.6626	.738U	.7869	.8283	.8848	.9262	.9639	1.UU15	1.U392
PHI										
.UUU	.U3UU							-.1UUU		-.158U
4U.UUU	.U64U	.UU3U		-.U88U	-.142U	-.17UU	-.12UU			-.149U
7U.UUU		-.211U	-.158U	-.U59U	.U9UU	.U33U	.U31U	-.U21U		
9U.UUU		-.162U	-.U69U	.U42U	.U79U	-.U14U	-.U21U	-.U59U		
1U5.UUU				.143U	.U45U	-.U37U	-.U46U	-.U79U		
11U.UUU									-.159U	
12U.UUU		-.136U	.U56U	.362U	-.U65U	-.U99U	-.U53U	-.U6UU	-.128U	
135.UUU				.163U	-.111U	-.2U2U	-.128U	-.16UU		
15U.UUU		-.U81U	.U35U	.U27U	-.2U9U	-.121U	-.U86U	-.163U		
165.UUU		-.U61U		.U75U	.U64U	-.U34U	-.U79U	-.211U		
18U.UUU		-.153U	-.U78U	-.U7UU						

AMES 11-7D7 OA12 OBA ORBITER FUSELAGE (RBPB13)

MACH (1) = .999 BETA (2) = -3.970

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3290	.3953	.5120
PHI															
.000	1.0760	.5990	.0000	-.4840	-.0270	.0180			.0030		-.0150	-.0480	.0130	.0250	.0470
20.000	1.0760		-.1000	-.4170	-.0450	.0130			.0040		-.0220				
40.000	1.0760		.0610	-.2670	.0030	.0060			-.0040		-.0550	-.0370	.0160	.0340	.0700
55.000	1.0760		.1190	-.1900	.0690	.0820			.0470		-.0280				
70.000	1.0760		.1050	-.1550	.0410	.0820			.0370		-.0850	-.3640	-.1080	-.0460	-.0980
90.000	1.0760	.6880	.0390	-.1710	.0840	.0930			.0280		-.1290	-.4480	-.1210	-.0650	-.0900
105.000	1.0760														
110.000	1.0760														
120.000	1.0760		-.0320	-.1030	.1120	.1540			.0530		-.3110	-.3260	-.1380	-.0890	-.0920
135.000	1.0760														
142.000	1.0760									-.4430					
150.000	1.0760		-.0930	-.0780	.1150	.3530			-.1560		-.6240	-.2150	-.1190	-.0750	-.0710
157.000	1.0760							.2660							
162.000	1.0760								-.2980						
165.000	1.0760										-.4620	-.1850	-.1160	-.0580	-.0640
169.000	1.0760								-.4050						
172.000	1.0760						.5550								
180.000	1.0760	.3780	-.2420	-.0920	.0810	.4710			.0000		-.5710	-.1860	-.1600	-.1050	-.1130

X/LB	.5873	.6626	.7380	.7869	.8283	.8846	.9262	.9639	1.0015	1.0392
PHI										
.000	.0440							-.0950		-.1540
40.000	.0750	.0270		-.0710	-.1200	-.1660	-.1160			-.1480
75.000		-.2470	-.2080	-.1260	.0300	-.0240	-.0080	-.0490		
90.000		-.1850	-.1110	-.0400	-.0050	-.0760	-.0570	-.0820		
105.000				.0410	-.0460	-.0920	-.0870	-.1100		
110.000									-.1830	
120.000		-.1230	.0550	.2440	-.1880	-.1520	-.0890	-.0830	-.1410	
135.000				.2680	-.1880	-.2040	-.1290	-.1500		
150.000		-.0870	.0990	.0970	-.1420	-.1710	-.1380	-.1920		
165.000		-.0550		.1030	.0750	-.1070	-.1550	-.2050		
180.000		-.0780	.0080	.0480						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB13)

MACH (1) = .598 BETA (3) = .100

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0880	.5940	.0000	-.4820	-.0300	.0200			.0080		-.0110	-.0090	.0160	.0280	.0480
20.000	1.0880		-.1550	-.4330	-.0340	.0200			.0080		-.0220				
40.000	1.0880		-.0580	-.3340	-.0140	.0210			.0020		-.0690	-.0590	-.0610	.0220	.0650
55.000	1.0880		-.0410	-.3100	-.0010	.0230			-.0140		-.0790				
75.000	1.0880		-.0830	-.2900	-.0380	.0210			-.0290		-.1350	-.3990	-.1310	-.0720	-.1110
90.000	1.0880	.5520	-.1540	-.2990	.0070	.0250			-.0460		-.1810	-.4700	-.1280	-.0750	-.0910
105.000	1.0880														
110.000	1.0880														
120.000	1.0880		-.1710	-.2030	.0450	.0800			-.0770		-.3290	-.3180	-.1260	-.0710	-.0630
135.000	1.0880														
142.000	1.0890									-.5040					
150.000	1.0880		-.1520	-.1230	.0830	.2980			-.2280		-.5690	-.2010	-.1050	-.0570	-.0540
157.000	1.0880							.1710							
162.000	1.0880								-.3980						
165.000	1.0880										-.4830	-.1780	-.1100	-.0540	-.0550
169.000	1.0880								-.4330						
172.000	1.0880						.5450								
180.000	1.0880	.3910	-.2320	-.0740	.0990	.4830			.0170		-.5500	-.1610	-.1150	-.0610	-.0470

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0460							-.0960		-.1530
40.000	.0740	.0310		-.0570	-.1070	-.1570	-.1230			-.1560
70.000		-.2710	-.2500	-.1920	-.0420	-.0810	-.0480	-.0760		
90.000		-.1940	-.1470	-.1210	-.0990	-.1290	-.0970	-.1090		
105.000				-.0940	-.1420	-.1520	-.1250	-.1410		
110.000									-.2090	
120.000		-.1080	.0430	.0660	-.3300	-.2110	-.1220	-.1140	-.1670	
135.000				.3190	-.0930	-.2480	-.1600	-.1660		
150.000		-.0540	.0730	.1800	-.0630	-.2350	-.1990	-.2180		
165.000		-.0490		.1450	.0680	-.1960	-.2180	-.2010		
180.000		-.0400	.0410	.0470						

AMES 11-707 OA12 C2A ORBITER FUSELAGE (RBPB13)

MACH (1) = .599 BETA (4) = 4.180

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0700	.5770	.0000	-.4920	-.0360	.0150			.0040		-.0200	-.0060	.0100	.0230	.0440
20.000	1.0700		-.2160	-.4570	-.0380	.0110			.0060		-.0310				
40.000	1.0700		-.1830	-.4020	-.0470	.0070			-.0150		-.1100	-.1020	-.0390	-.0040	.0450
55.000	1.0700		-.2120	-.4240	-.0630	-.0360			-.0670		-.1300				
75.000	1.0700		-.2680	-.4240	-.1050	-.0310			-.0780		-.1820	-.4260	-.1520	-.0810	-.1150
90.000	1.0700	.3940	-.3380	-.4240	-.0570	-.0390			-.1020		-.2140	-.4790	-.1380	-.0760	-.0910
105.000	1.0700														
110.000	1.0700														
120.000	1.0700		-.3180	-.3170	-.0290	-.0030			-.2010		-.3400	-.3080	-.1100	-.0620	-.0820
135.000	1.0700														
142.000	1.0700									-.6170					
150.000	1.0700		-.2420	-.1950	.0320	.2140			-.3310		-.5130	-.1970	-.0970	-.0530	-.0440
157.000	1.0700							.0300							
162.000	1.0700								-.5480						
165.000	1.0700										-.4830	-.1710	-.1080	-.0570	-.0570
169.000	1.0700								-.4840						
172.000	1.0700						.4900								
180.000	1.0700	.3910	-.2390	-.0890	.0880	.4610			-.0120		-.5630	-.1810	-.1390	-.0930	-.1080

X/LB	.5873	.6628	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0430							-.1040		-.1560
40.000	.0640	.0350		-.0430	-.0960	-.1470	-.1270			-.1610
70.000		-.2800	-.2830	-.2390	-.1160	-.1270	-.0860	-.0970		
90.000		-.2020	-.1770	-.2010	-.1630	-.1710	-.1320	-.1330		
105.000				-.1940	-.2320	-.1980	-.1620	-.1650		
110.000									-.2270	
120.000		-.1110	-.0030	-.1320	-.4970	-.2740	-.1660	-.1460	-.1890	
135.000				.3650	-.1630	-.3320	-.2210	-.2140		
150.000		-.0610	.0800	.2240	-.0360	-.3220	-.2670	-.2520		
165.000		-.0590		.1570	.0690	-.3220	-.2790	-.2000		
180.000		-.0800	.0030	.0450						

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBPB13)

MACH (1) = .800 BETA (5) = 8.270

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5126
PHI															
.000	1.0120	.5430	.0000	-.5200	-.0570	-.0050			-.0110		-.0270	-.0180	-.0040	.0090	.0310
20.000	1.0120		-.2810	-.4880	-.0610	-.0080			-.0110		-.0530				
40.000	1.0120		-.3140	-.4810	-.0910	-.0340			-.0660		-.1800	-.1720	-.0990	-.0440	.0090
55.000	1.0120		-.3860	-.5350	-.1280	-.0940			-.1160		-.1680				
70.000	1.0120		-.4600	-.5600	-.1620	-.0780			-.1200		-.2110	-.4360	-.1620	-.0970	-.1130
90.000	1.0120	.2260	-.5260	-.5680	-.1160	-.0860			-.1540		-.2420	-.4730	-.1260	-.0740	-.0860
105.000	1.0120														
110.000	1.0120														
120.000	1.0120		-.4720	-.4350	-.1040	-.0870			-.3220		-.3420	-.2970	-.1060	-.0590	-.0590
135.000	1.0120														
142.000	1.0120									-.8890					
150.000	1.0120		-.3350	-.2720	-.0450	.1060			-.4290		-.4860	-.2070	-.1080	-.0690	-.0560
157.000	1.0120							-.1350							
162.000	1.0120								-.7020						
165.000	1.0120										-.5000	-.1800	-.1130	-.0970	-.0970
169.000	1.0120								-.5440						
172.000	1.0120						.4020								
180.000	1.0120	.3680	-.2560	-.1210	.0460	.4000			-.0660		-.6120	.2290	-.1950	-.2840	-.1940

X/LB	.5873	.6626	.7386	.7869	.8283	.8848	.9062	.9639	1.0015	1.0392
PHI										
.000	.0280							-.1030		-.1560
40.000	.0410	.0240		-.0400	-.0890	-.1460	-.1330			-.1750
70.000		-.2930	-.3120	-.291	-.1690	-.1630	-.1170	-.1190		
90.000		-.2140	-.2210	-.2630	-.2230	-.2090	-.1660	-.1510		
105.000				-.2710	-.3110	-.2470	-.1910	-.1900		
110.000									-.2500	
120.000		-.1290	-.0280	-.0320	-.6560	-.3430	-.2180	-.1830	-.2140	
135.000				.3630	-.2160	-.4500	-.3020	-.2540		
150.000		-.0870	.0090	.1960	-.1140	-.4350	-.3690	-.3140		
165.000		-.1310		.1130	.0070	-.5280	-.4330	-.2340		
180.000		-.1520	-.0830	-.0660						

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBPB13)

MACH (2) = .907 BETA (1) = -8.140

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1710	.7370	.0000	-.7000	.0180	.0330			.0090		-.0640	-.0840	-.0560	.0230	.0650
25.000	1.1710		.0990	-.6280	-.0570	.0190			.0040		-.0830				
40.000	1.1710		.2840	-.3270	.0090	-.0180			-.0420		-.1450	-.1870	-.0480	.0430	.0940
55.000	1.1710		.3690	-.1330	.1740	.1920			.1520		.0330				
70.000	1.1710		.3800	-.0590	.1780	.2190			.1620		.0000	-.0710	-.1260	.0240	-.0120
90.000	1.1710	.9390	.3170	-.0640	.2240	.2450			.1800		-.0230	-.0120	-.1490	-.0020	-.0290
105.000	1.1710														
110.000	1.1710														
120.000	1.1710		.1910	-.0290	.2290	.3350			.2790		-.1940	-.3270	-.0990	-.0620	-.0670
135.000	1.1710														
142.000	1.1710									-.4950					
150.000	1.1710		.0520	-.0890	.1910	.5270			.2060		-.6880	-.6780	-.0710	-.0430	-.0240
157.000	1.1710							.5340							
162.000	1.1710								.0850						
165.000	1.1710										-.5620	-.5420	-.0780	-.0180	-.0050
169.000	1.1710								-.1330						
172.000	1.1710						.7200								
180.000	1.1710	.5110	-.2180	-.2010	.1070	.5790			.2020		-1.0900	-.4640	-.3220	-.1960	-.1100

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0840							-.1420		-.1450
40.000	.1250	.0660		-.0610	-.1800	-.2970	-.2490			-.1520
75.000		-.2390	-.3660	-.1200	.0500	.0480	.0810	.0640		
90.000		-.1950	-.2240	.0140	-.0100	-.0010	.0380	.0440		
105.000				.1120	-.0590	-.0410	.0080	.0120		
110.000									-.1630	
120.000		-.1960	.0100	.4030	-.2000	-.0960	.0110	.0150	-.1190	
135.000				.2710	-.0830	-.1440	-.0350	-.0660		
150.000		-.1130	.0620	.0820	-.1970	-.0670	-.0070	-.1140		
165.000		-.0860		.1320	.0740	-.0640	-.0100	-.2060		
180.000		-.1400	-.0260	.0300						

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBPB13)

MACH (2) = .899 BETA (2) = -4.020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1600	.7680	.0000	-.6210	.0520	.0440			.0100		-.0540	-.0800	-.0360	.0250	.0760
20.000	1.1600		.0600	-.6830	-.0080	.0320			.0080		-.0640				
40.000	1.1600		.1890	-.4970	.0290	.0300			-.0020		-.1030	-.1670	-.0380	.0420	.0980
55.000	1.1600		.2270	-.3360	.0990	.1290			.0780		-.0350				
70.000	1.1600		.2050	-.2620	.0790	.1460			.0730		-.0820	-.6330	-.1260	-.0080	-.0420
90.000	1.1600	.9210	.1240	-.2440	.1300	.1710			.0880		-.1320	-.7690	-.1290	-.0220	-.0430
105.000	1.1600														
110.000	1.1600														
120.000	1.1600		.0310	-.1720	.1630	.2700			.1520		-.2920	-.8770	-.1790	-.0380	-.0420
135.000	1.1600														
142.000	1.1600									-.7140					
150.000	1.1600		-.0430	-.2020	.1700	.4990			.1510		-.7040	-.6670	-.0760	-.0190	-.0240
157.000	1.1600							.4790							
162.000	1.1600								.0150						
165.000	1.1600										-.8550	-.4690	-.0990	.0060	-.0170
169.000	1.1600								-.1280						
172.000	1.1600						.7390								
180.000	1.1600	.5180	-.2430	-.1940	.1390	.6200			.2120		-1.2140	-.4260	-.1980	-.0350	-.0590

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
.000	.0930							-.1210		-.1390
40.000	.1240	.0810		-.0510	-.1590	-.2970	-.3330			-.1530
70.000		-.2830	-.3710	-.2240	-.0860	-.0630	.0220	.0040		
90.000		-.2330	-.2190	-.0870	-.1790	-.1020	-.0170	-.0110		
105.000				.0010	-.2440	-.1280	-.0450	-.0440		
110.000									-.1890	
120.000		-.1810	.0170	.2730	-.3510	-.1390	-.0400	-.0360	-.1440	
135.000				.3420	-.0890	-.1490	-.0710	-.1020		
150.000		-.1010	.0640	.1290	-.1340	-.1780	-.0860	-.1720		
165.000		-.0860		.1450	.0650	-.1480	-.1180	-.2090		
180.000		-.0920	.0170	.0680						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBFB13)

MACH (2) = .901 BETA (3) = .100

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2130	.7590	.0000	-.5960	.0310	.0500			.0200		-.0510	-.0700	-.0330	.0390	.0810
20.000	1.2130		.0220	-.6140	.0280	.0450			.0210		-.0640				
40.000	1.2130		.0890	-.6030	.0340	.0560			.0170		-.1080	-.1590	-.0530	.0400	.0920
55.000	1.2130		.0900	-.5790	.0560	.0790			.0260		-.1050				
75.000	1.2130		.0450	-.4960	.0290	.0920			.0180		-.1710	-.6570	-.1300	-.0170	-.0490
90.000	1.2130	.7000	-.0370	-.4700	.0740	.1130			.0180		-.2230	-.7860	-.1730	-.0110	-.0360
105.000	1.2130														
110.000	1.2130														
120.000	1.2130		-.0990	-.3830	.1120	.2040			.0290		-.4420	-.8940	-.1310	-.0010	-.0150
135.000	1.2130									-.9980					
142.000	1.2130														
150.000	1.2130		-.1100	-.2950	.1500	.4540			.0990		-.8250	-.5620	-.0410	.0080	-.0040
157.000	1.2130							.3960							
162.000	1.2130								-.0540						
165.000	1.2130										-.8850	-.4880	-.1300	.0290	-.0040
169.000	1.2130								-.1160						
172.000	1.2130						.7300								
180.000	1.2130	.5320	-.2210	-.1660	.1640	.6370			.2250		-1.2070	-.3860	-.0070	.0110	.0010

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1010							-.1100		-.1350
40.000	.1270	.0950		-.0320	-.1300	-.2750	-.3330			-.1540
75.000		-.2850	-.3240	-.2360	-.1840	-.2760	-.0260	-.0220		
90.000		-.2200	-.1880	-.1580	-.2960	-.4500	-.0510	-.0400		
105.000				-.1050	-.3420	-.4910	-.0670	-.0730		
110.000									-.2100	
120.000		-.1340	.0320	.0800	-.4030	-.5540	-.0580	-.0700	-.1680	
135.000				.3430	-.0800	-.5540	-.1160	-.1320		
150.000		-.0760	.0680	.2270	-.0440	-.4340	-.1820	-.2060		
165.000		-.0660		.1790	.0890	-.3250	-.2280	-.2060		
180.000		-.0620	.0410	.0910						

AMES 11-7D7 OA12 OBA ORBITER FUSELAGE (RBPB13)

MACH (2) = .903 BETA (4) = 4.230

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1820	.7490	.0000	-.6180	.0430	.0420			.0100		-.0590	-.0830	-.0350	.0230	.0770
20.000	1.1820		-.0270	-.6290	.0380	.0380			.0170		-.0690				
40.000	1.1820		-.0100	-.7000	.0410	.0590			.0060		-.1480	-.1930	-.1000	.0060	.0780
55.000	1.1820		-.0430	-.7110	.0230	.0310			-.0250		-.1830				
70.000	1.1820		-.1070	-.6370	.0150	.0450			-.0360		-.2680	-.7030	-.1430	-.0420	-.0500
90.000	1.1820	.5720	-.1890	-.5960	.0510	.0600			-.0440		-.3480	-.7820	-.1500	-.0240	-.0270
105.000	1.1820														
110.000	1.1820														
120.000	1.1820		-.2270	-.5310	.0510	.1320			-.0860		-.5650	-.7560	-.1650	.0030	-.0030
135.000	1.1820														
142.000	1.1820									-1.1410					
150.000	1.1820		-.1940	-.3810	.0950	.3825			.0230		-.5860	-.5550	-.2570	.0280	.0050
157.000	1.1820							.2760							
162.000	1.1820								-.1520						
165.000	1.1820										-.6160	-.5660	-.2110	.0340	-.0010
169.000	1.1820								-.1310						
172.000	1.1820						.6790								
180.000	1.1820	.5320	-.2310	-.1690	.1440	.6170			.2080		-1.1780	-.4040	-.2030	-.0280	-.0530

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	9262	.9639	1.0015	1.0392
PHI										
.000	.0930							-.1150		-.1450
40.000	.1080	.0900		-.0260	-.1150	-.2650	-.3480			-.1710
70.000		-.2830	-.2920	-.3130	-.2830	-.5300	-.1320	-.0780		
90.000		-.2020	-.1700	-.2380	-.3730	-.5370	-.1890	-.1000		
105.000				-.1990	-.4300	-.5430	-.2250	-.1280		
110.000									-.2270	
120.000		-.1120	-.0010	-.1120	-.5680	-.6100	-.3330	-.1130	-.1970	
135.000				.3360	-.1000	-.6520	-.4980	-.1660		
150.000		-.0650	.0570	.2440	.0200	-.4700	-.4520	-.2270		
165.000		-.0680		.1710	.1030	-.4170	-.4120	-.2150		
180.000		-.0920	.0220	.0740						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB13)

MACH (2) = .902 BETA (5) = 8.380

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1530	.7290	.0000	-.6950	.0240	.0230			.0010		-.0670	-.0870	-.0550	.0100	.0630
20.000	1.1530		-.0860	-.6820	.0130	.0255			.0030		-.0890				
40.000	1.1530		-.1170	-.7730	.0010	.0100			-.0330		-.2180	-.2570	-.1770	-.0360	.0400
55.000	1.1530		-.1710	-.7460	-.0560	-.0160			-.0700		-.2360				
70.000	1.1530		-.2560	-.7580	-.1260	.0080			-.0790		-.3240	-.7230	-.1590	-.0660	-.0450
90.000	1.1530	.4290	-.3280	-.6350	-.1450	.0150			-.1020		-.3880	-.7950	-.1680	-.0270	-.0220
105.000	1.1530														
110.000	1.1530														
120.000	1.1530		-.3390	-.6320	-.0430	.0530			-.2060		-.5160	-.5750	-.2430	-.0050	-.0030
135.000	1.1530									-.9640					
142.000	1.1530								-.0760		-.6820	-.5640	-.3150	.0100	-.0180
150.000	1.1530		-.2620	-.4470	.0150	.2890		.1260							
157.000	1.1530								-.2600						
162.000	1.1530										-.6360	-.5280	-.2060	-.0220	-.0420
165.000	1.1530								-.1580						
169.000	1.1530						.5870								
172.000	1.1530								.1710		-1.1690	-.4640	-.2840	-.1250	-.1200
180.000	1.1530	.5230	-.2320	-.1720	.1010	.5560									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0720							-.1290		-.1530
40.000	.0810	.0730		-.0220	-.1060	-.2530	-.3390			-.1990
70.000		-.2560	-.2740	-.3230	-.3100	-.5620	-.2920	-.1140		
90.000		-.1850	-.1740	-.2610	-.4090	-.5590	-.3960	-.1270		
105.000				-.2350	-.4980	-.5630	-.5520	-.1600		
110.000									-.2610	
120.000		-.1160	-.0110	-.1400	-.6440	-.6590	-.6050	-.1780	-.1910	
135.000				.4070	-.0330	-.6930	-.5970	-.4750		
150.000		-.1040	.0120	.1260	-.1020	-.5380	-.6160	-.4530		
165.000		-.1040		.1290	.0610	-.5020	-.5300	-.2730		
180.000		-.1330	-.0230	.0210						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB14) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 10.000 RUDDER = -20.000
ELEVON = .000 RUDFLR = .000

MACH (1) = .599 BETA (1) = -8.060

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9860	.7320	.1000	-.2980	.0430	.0710			.0590		.0380	.0410	.0590	.0790	.1030
20.000	.9860		.1840	-.2070	.0540	.0820			.0730		.0430				
40.000	.9860		.3530	-.0240	.1360	.1180			.1060		.0540	.0550	.1030	.1250	.1610
55.000	.9850		.3890	.0460	.1860	.1680			.1290		.0490				
70.000	.9860		.3320	.0160	.1280	.1580			.1100		-.0230	-.3320	-.1210	-.0750	-.1470
90.000	.9860	.7760	.1780	-.0680	.1440	.1490			.0960		-.0920	-.4790	-.1800	-.1440	-.1850
105.000	.9860														
110.000	.9860														
120.000	.9860		-.0590	-.1260	.0860	.1620			.1920		-.4170	-.4400	-.2530	-.2220	-.2370
135.000	.9860														
142.000	.9860									-.4620					
150.000	.9860		-.2430	-.2090	.0230	.3140			-.1680		-.8280	-.2750	-.1750	-.1390	-.1430
157.000	.9860							.2560							
162.000	.9860								-.3440						
165.000	.9860										-.4900	-.2230	-.1700	-.1210	-.1320
169.000	.9860								-.5590						
172.000	.9860						.4630								
180.000	.9860	.1220	-.5010	-.2600	-.0440	.3600			-.1610		-.6550	-.2570	-.2820	-.3510	-.1750

X/LB	.5972	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1100							-.0660		-.1410
40.000	.1840	.1450		.0140	-.0550	-.1080	-.0780			-.1370
70.000		-.3550	-.2390	-.0920	.0840	.0350	.0420	-.0110		
90.000		-.2860	-.1320	.0170	.0700	-.0200	-.0150	-.0470		
105.000				.1510	.0500	-.0370	-.0450	-.0850		
110.000									-.1720	
120.000		-.2600	-.0180	.3800	-.0440	-.1200	-.0740	-.0730	-.1300	
135.000				.0260	-.2200	-.2850	-.1920	-.2130		
150.000		-.1520	-.0260	-.0510	-.2950	-.1570	-.1030	-.1750		
165.000		-.1390		.0010	-.0100	-.0700	-.0960	-.2070		
180.000		-.1710	-.0900	-.0820						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB14)

MACH (1) = .600 BETA (2) = -3.980

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0280	.7810	.6000	-.2690	.0720	.0920			.0780		.0540	.0550	.0740	.0910	.1200
25.000	1.0280		.1720	-.2010	.0770	.1010			.0850		.0550				
40.000	1.0280		.2650	-.0790	.1220	.1290			.1100		.0300	.0140	.0740	.1050	.1520
55.000	1.0280		.2510	-.0790	.1150	.0880			.0480		-.0270				
70.000	1.0280		.1580	-.1230	.0180	.0830			.0360		-.0910	-.3990	-.1780	-.1260	-.1910
90.000	1.0280	.6540	-.0030	-.2000	.0690	.0800			.0250		-.1530	-.5280	-.2090	-.1610	-.1960
105.000	1.0280														
110.000	1.0280														
120.000	1.0280		-.1860	-.2120	.0450	.1220			.0940		-.4360	-.4190	-.2260	-.1850	-.1970
135.000	1.0280														
142.000	1.0280									-.5240					
150.000	1.0280		-.3040	-.2480	.0260	.3040			-.2340		-.7600	-.2550	-.1550	-.1130	-.1220
157.000	1.0280							.2130							
162.000	1.0280								-.4130						
165.000	1.0280										-.5050	-.2180	-.1610	-.0870	-.1250
169.000	1.0280								-.5640						
172.000	1.0280						.4900								
180.000	1.0280	.1390	-.4920	-.1790	-.0030	.4130			-.1280		-.5980	-.1970	-.1660	-.1530	-.1260

X/LB	.5873	.6626	.7380	.7868	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1240							-.0690		-.1500
40.000	.1730	.1480		.0300	-.0360	-.1060	-.0840			-.1400
70.000		-.4300	-.3220	-.1970	-.0100	-.0440	-.0130	-.0410		
90.000		-.3120	-.1830	-.0730	-.0220	-.0780	-.0530	-.0750		
105.000				.0300	-.0580	-.1060	-.0880	-.1120		
110.000									-.1850	
120.000		-.2280	-.0110	.2630	-.1720	-.1680	-.0990	-.0940	-.1490	
135.000				.1640	-.1710	-.2570	-.1650	-.1850		
150.000		-.1340	.0010	.0190	-.2230	-.2020	-.1520	-.1990		
165.000		-.1250		.0360	.0040	-.1580	-.1800	-.2060		
180.000		-.1060	-.0250	.0030						

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBPB14)

MACH (1) = .599 BETA (3) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0180	.8050	.0000	-.2710	.0710	.1000			.0800		.0580	.0580	.0790	.0960	.1250
20.000	1.0180		.1100	-.2260	.0740	.0980			.0860		.0520				
40.000	1.0180		.1390	-.1700	.0770	.0990			.0760		-.0380	-.0500	.0150	.0670	.1240
55.000	1.0180		.0890	-.2160	.0180	.0020			-.0240		-.1000				
70.000	1.0180		-.0330	-.2640	-.0710	.0200			-.0260		-.1460	-.4470	-.2140	-.1600	-.2190
90.000	1.0180	.5190	-.1900	-.3230	-.0040	.0240			-.0370		-.2050	-.5450	-.2690	-.1660	-.1910
105.000	1.0180														
110.000	1.0180														
125.000	1.0180		-.3180	-.2970	.0050	.0750			-.0100		-.4330	-.3830	-.1910	-.1420	-.1430
135.000	1.0180														
142.000	1.0180									-.5670					
150.000	1.0180		-.3610	-.2870	.0200	.2730			-.3010		-.6810	-.2350	-.1290	-.0930	-.1060
157.000	1.0180							.1390							
162.000	1.0180								-.5030						
165.000	1.0180										-.5120	-.2010	-.1460	-.0710	-.0910
169.000	1.0180								-.5760						
172.000	1.0180						.4860								
180.000	1.0180	.1830	-.4680	-.1700	.0180	.4320			-.1.00		-.5650	-.1720	-.1170	-.0720	-.0760

X/LB	.5873	.6626	.7380	.7769	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1330							-.0700		-.1350
40.000	.1540	.1400		.0360	-.0290	-.1030	-.0850			-.1390
70.000		-.1470	-.3685	-.2730	-.0920	-.1150	-.0660	-.0750		
90.000		-.2260	-.2390	- 1820	-.1510	-.1360	-.1000	-.1060		
105.000				-.1440	-.1590	-.1640	-.1320	-.1400		
110.000									-.2050	
125.000		-.1900	.0020	.0890	-.3300	-.2250	-.1330	-.1160	-.1620	
135.000				.2360	-.1500	-.2680	-.1780	-.1770		
150.000		-.1310	-.0020	.1600	-.1340	-.2580	-.2250	-.2310		
165.000		-.0980		.0740	.0650	-.2300	-.2320	-.2170		
180.000		-.0810	-.0030	.0030						

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBPB14)

MACH (1) = .999 BETA (4) = 4.170

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0040	.7810	.0000	-.2770	.0650	.0310			.0600		.0520	.0390	.0770	.0890	.1220
20.000	1.0040		.0480	-.2340	.0560	.0830			.0740		.0350				
40.000	1.0040		.0050	-.2590	.0140	.0450			.0100		-.1320	-.1480	-.0600	.0140	.0900
55.000	1.0040		-.0930	-.3550	-.0710	-.0820			-.0990		-.1600				
70.000	1.0040		-.2280	-.4070	-.1460	-.0380			-.0860		-.1960	-.4740	-.2360	-.1880	-.2350
90.000	1.0040	.3580	-.3840	-.4490	-.0600	-.0300			-.0910		-.2370	-.5480	-.2080	-.1550	-.1880
105.000	1.0040														
110.000	1.0040														
120.000	1.0040		-.4530	-.4100	-.0420	.0190			-.1260		-.4250	-.3480	-.1540	-.1060	-.1150
135.000	1.0040														
142.000	1.0040									-.6240					
150.000	1.0040		-.4340	-.3560	-.0220	.2070			-.3880		-.5930	-.2090	-.1050	-.0730	-.0810
157.000	1.0040							.0190							
162.000	1.0040								-.6400						
165.000	1.0040										-.5110	-.1840	-.1230	-.0680	-.0830
169.000	1.0040								-.6210						
172.000	1.0040						.4390								
180.000	1.0040	.1840	-.4700	-.2140	.0060	.4110			-.1340		-.5890	-.1850	-.1420	-.1250	-.1260

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1260							-.0680		-.1390
40.000	.1270	.1280		.0430	-.0170	-.0980	-.0890			-.1500
70.000		-.4510	-.3940	-.3170	-.1870	-.1790	-.1130	-.1090		
90.000		-.3340	-.2720	-.2940	-.2550	-.1980	-.1400	-.1280		
105.000				-.2880	-.2760	-.2180	-.1700	-.1640		
110.000									-.2260	
120.000		-.1950	-.0700	-.1910	-.4930	-.2920	-.1760	-.1480	-.1790	
135.000				.2570	-.1710	-.3360	-.2170	-.1980		
150.000		-.1120	.0170	.2260	-.1010	-.3490	-.2750	-.2550		
165.000		-.1030		.1190	.0510	-.3410	-.2850	-.2090		
180.000		-.1080	-.0240	.0080						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBPB14)

MACH (1) = .602 BETA (5) = 8.250

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9710	.7490	.0000	-.2940	.0400	.0750			.0630		.0350	.0420	.0560	.0780	.1040
20.000	.9710		-.0340	-.2940	.0180	.0530			.0540		.0050				
40.000	.9710		-.1350	-.3550	-.0620	-.0350			-.0860		-.2620	-.2620	-.1700	-.0610	.0380
55.000	.9710		-.2730	-.4750	-.1590	-.1560			-.1620		-.0230				
70.000	.9710		-.4150	-.5350	-.2030	-.0880			-.1240		-.2350	-.4910	-.2570	-.1990	-.2460
90.000	.9710	.2110	-.5460	-.5800	-.1110	-.0680			-.1360		-.2620	-.5430	-.2070	-.1480	-.1890
105.000	.9710														
110.000	.9710								-.2200		-.4090	-.3200	-.1330	-.0930	-.1190
120.000	.9710		-.5910	-.5130	-.0910	-.0490									
135.000	.9710									-.7880					
142.000	.9710								-.4680		-.5390	-.2050	-.0990	-.0720	-.0890
150.000	.9710		-.5150	-.4290	-.0710	.1230		-.1240							
157.000	.9710								-.7840						
162.000	.9710										-.5130	-.1770	-.1090	-.0820	-.1060
165.000	.9710								-.6690						
169.000	.9710						.3500								
172.000	.9710								-.1800		-.6330	-.2440	-.2250	-.3410	-.1690
180.000	.9710	.1600	-.4840	-.2680	-.0340	.3480									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1140							-.0770		-.1440
40.000	.0910	.1020		.0450	-.0120	-.0920	-.0940			-.1580
70.000		-.4530	-.4220	-.3690	-.2510	-.2060	-.1370	-.1190		
90.000		-.3520	-.3410	-.3690	-.3110	-.2370	-.1810	-.1460		
105.000				-.3570	-.3590	-.2670	-.2120	-.1880		
110.000									-.2520	
120.000		-.2200	-.0940	-.2610	-.6820	-.3660	-.2310	-.1850	-.2060	
135.000				.3520	-.2110	-.4270	-.2870	-.2340		
150.000		-.1330	-.0320	.1480	-.2110	-.4960	-.4130	-.3450		
165.000		-.1400		.0770	-.0290	-.5160	-.4340	-.2250		
180.000		-.1660	-.1010	-.0820						

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBPB14)

MACH (2) = .902 BETA (1) = -8.150

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1320	.8950	.0000	-.4430	.0790	.1150			.0890		.0380	.0110	.0260	.0800	.1470
20.000	1.1320		.3180	-.3020	.0820	.1240			.1030		.0450				
40.000	1.1320		.4620	-.0520	.1810	.1600			.1390		.0470	-.0110	.0550	.1270	.2520
55.000	1.1320		.4850	.0200	.2310	.2320			.1950		.0890				
70.000	1.1320		.4250	.0010	.1580	.2330			.1910		.0320	-.5530	-.2610	-.0490	-.0640
90.000	1.1320	.9010	.2680	-.0990	.1900	.2400			.2030		-.0340	-.7070	-.2980	-.1050	-.1040
105.000	1.1320														
110.000	1.1320														
120.000	1.1320		.0150	-.1910	.1380	.2870			.3420		-.3540	-.8830	-.3220	-.1730	-.1690
135.000	1.1320														
142.000	1.1320									-.5000					
150.000	1.1320		-.1780	-.4380	.0850	.4720			.1310		-.8060	-.7520	-.3160	-.0750	-.0810
157.000	1.1320							.4830							
162.000	1.1320								.0830						
165.000	1.1320										-.6250	-.5990	-.2990	-.0310	-.0810
169.000	1.1320								-.2510						
172.000	1.1320						.6630								
180.000	1.1320	.3210	-.4550	-.5530	.0350	.5220			.0930		-1.0810	-.5430	-.3720	-.1570	-.1040

X/LB	.5973	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1680							-.1800		-.1590
40.000	.2410	.2110		.0320	-.0620	-.2080	-.2710			-.1570
70.000		-.3870	-.6480	-.1260	.0490	-.1320	-.0760	-.0520		
90.000		-.3170	-.5330	.0550	.0080	-.1780	-.0960	-.0550		
105.000				.0830	.0360	-.2270	-.1150	-.0850		
110.000									-.2060	
120.000		-.3680	-.1230	.4540	-.0650	-.3410	-.0910	-.0610	-.1500	
135.000				.1700	-.1350	-.4290	-.1360	-.1550		
150.000		-.2300	-.0220	-.0030	-.2810	-.1460	-.0630	-.1670		
165.000		-.2060		.0450	-.0040	-.1140	-.0680	-.2170		
180.000		-.1950	-.0640	-.0090						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7D7 OA12 O2A ORBITER FUSELAGE (RBPB14)

MACH (2) = .901 BETA (2) = -4.040

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1430	.9230	.0000	-.4220	.1130	.1310			.1040		.0540	.0160	.0430	.0920	.1630
20.000	1.1430		.2890	-.3240	.1140	.1380			.1160		.0510				
40.000	1.1430		.3710	-.1550	.1550	.1730			.1420		.0330	-.0350	.0250	.1100	.1930
55.000	1.1430		.3510	-.1450	.1410	.1560			.1200		.0170				
70.000	1.1430		.2580	-.1780	.0590	.1630			.1200		-.0460	-.6080	-.3810	-.0840	-.0980
90.000	1.1430	.7920	.0930	-.2790	.1160	.1810			.1330		-.1260	-.7630	-.3530	-.1120	-.1040
105.000	1.1430														
110.000	1.1430								.2410		-.4160	-.9040	-.3810	-.1160	-.1180
120.000	1.1430		-.1300	-.3680	.1080	.2550									
135.000	1.1430									-.6730					
142.000	1.1430								.1010		-.8230	-.6560	-.2980	-.0350	-.0620
150.000	1.1430		-.2540	-.4930	.0990	.4660		.4520							
157.000	1.1430								-.0420						
162.000	1.1430										-.8410	-.4960	-.2680	.0190	-.0580
165.000	1.1430								-.2290						
169.000	1.1430						.6770								
172.000	1.1430								.1130		-1.1290	-.46.0	-.2350	-.0640	-.0560
180.000	1.1430	.3120	-.4660	-.5390	.0820	.5620									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1840							-.2580		-.1560
40.000	.2320	.2190		.0700	-.0360	-.2020	-.2690			-.1610
70.000		-.4060	-.6880	-.2320	-.0530	-.2730	-.1490	-.1020		
90.000		-.3260	-.5470	-.0590	-.0980	-.2760	-.1650	-.0950		
105.000				-.0400	-.0860	-.3050	-.1710	-.1180		
110.000									-.2200	
120.000		-.3140	-.1080	.3170	-.2060	-.4040	-.1250	-.0970	-.1780	
135.000				.2730	-.1040	-.5180	-.1460	-.1570		
150.000		-.2050	-.0140	.0390	-.1810	-.2900	-.1400	-.2000		
165.000		-.1880		.0850	-.0040	-.2450	-.1790	-.2160		
180.000		-.1610	-.0550	.0140						

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBPB14)

MACH (2) = .899 BETA (3) = .090

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1630	.9220	.0000	-.3970	.1180	.1360			.1040		.0540	.0250	.0460	.1020	.1670
20.000	1.1630		.2350	-.3680	.1130	.1370			.1110		.0440				
40.000	1.1630		.2510	-.2910	.1150	.1520			.1140		-.0200	-.0870	-.0390	.0810	.1680
55.000	1.1630		.2000	-.3400	.0530	.0790			.0480		-.0660				
70.000	1.1630		.0840	-.4140	-.0190	.1060			.0570		-.1230	-.6570	-.4260	-.1110	-.1270
90.000	1.1630	.6680	-.0720	-.4960	.0630	.1290			.0710		-.2130	-.8480	-.2400	-.0990	-.1020
105.000	1.1630														
110.000	1.1630														
120.000	1.1630		-.2500	-.5070	.0890	.2150			.1250		-.5000	-.9350	-.3440	-.0430	-.0610
135.000	1.1630														
142.000	1.1630									-.8330					
150.000	1.1630		-.3200	-.5120	.1060	.4310			.0560		-.8870	-.5490	-.1980	.0150	-.0410
157.000	1.1630							.3890							
162.000	1.1630								-.1080						
165.000	1.1630										-.9410	-.4820	-.2300	.0310	-.0270
169.000	1.1630								-.2110						
172.000	1.1630						.6650								
180.000	1.1630	.3300	-.4610	-.5130	.1040	.5790			.1220		-.7790	-.5800	-.1130	.0110	-.0220

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1910							-.2490		-.1550
40.000	.2130	.2150		.0820	-.0150	-.1930	-.2620			-.1700
70.000		-.4510	-.6690	-.2660	-.1230	-.3940	-.4330	-.1200		
90.000		-.3290	-.4860	-.1770	-.2010	-.3870	-.4920	-.0910		
105.000				-.2080	-.2260	-.3940	-.4840	-.1290		
110.000									-.2410	
120.000		-.2440	-.0660	.0950	-.3480	-.4830	-.4140	-.0980	-.1890	
135.000				.2850	-.0900	-.5110	-.3110	-.1630		
150.000		-.1730	-.0320	.1770	-.0940	-.4260	-.2950	-.2600		
165.000		-.1540		.1120	.0470	-.3640	-.2940	-.2200		
180.000		-.1350	-.0340	.0310						

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBPB14)

MACH (2) = .900 BETA (4) = 4.210

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0652	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.1450	.9050	.0000	-.4240	.1080	.1310			.1050		.0490	.0240	.0380	.0970	.1600
25.000	1.1450		.1740	-.4040	.0970	.1250			.1020		.0290				
40.000	1.1450		.1370	-.4470	.0590	.1010			.0590		-.1130	-.1600	-.1340	.0270	.1330
55.000	1.1450		.0560	-.5870	-.0280	.0040			-.0210		-.1430				
70.000	1.1450		-.0770	-.6230	-.0830	.0560			.0040		-.1930	-.6890	-.3680	-.1380	-.1460
90.000	1.1450	.5360	-.2290	-.6100	.0400	.0850			.0130		-.2890	-.8220	-.2320	-.0950	-.0920
105.000	1.1450														
110.000	1.1450														
120.000	1.1450		-.3670	-.5810	.0640	.1640			.0140		-.5340	-.8610	-.2130	-.0350	-.0360
135.000	1.1450														
142.000	1.1450									-1.0260					
150.000	1.1450		-.3880	-.5480	.0820	.3770			-.0670		-.5910	-.5500	-.3090	.0170	-.0180
157.000	1.1450														
162.000	1.1450								-.2000						
165.000	1.1450										-.6050	-.5780	-.2660	.0350	-.0130
169.000	1.1450								-.2150						
172.000	1.1450						.6310								
180.000	1.1450	.3320	-.4610	-.5230	.0850	.5630			.1090		-1.1320	-.4720	-.2540	-.0530	-.0550

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1810							-.1900		-.1600
40.000	.1840	.1990		.0880	-.0070	-.1830	-.2650			-.1880
70.000		-.4070	-.5880	-.3090	-.3200	-.5170	-.5410	-.1740		
90.000		-.3030	-.3750	-.2850	-.3940	-.4830	-.5870	-.1730		
105.000				-.2630	-.4030	-.5060	-.5810	-.2170		
110.000									-.2600	
120.000		-.2020	-.1090	-.1580	-.4970	-.5810	-.4770	-.3060	-.1990	
135.000				.2650	-.1110	-.5870	-.4590	-.3300		
150.000		-.1460	-.0190	.2140	-.0280	-.4790	-.4280	-.3120		
165.000		-.1330		.1310	.0700	-.4120	-.3890	-.2180		
180.000		-.1550	-.0400	.0200						

AMES 11-7D7 OA12 OEA ORBITER FUSELAGE (RBPB14)

MACH (2) = .906 BETA (5) = 8.350

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1200	.0920	.0000	-.4460	.0780	.1090			.0970		.0290	.0070	.0210	.0700	.1390
25.000	1.1200		.1190	-.4530	.0610	.0970			.0840		.0030				
40.000	1.1200		.0310	-.5620	-.0260	.0270			-.0200		-.2330	-.2610	-.2400	-.0540	.0840
55.000	1.1200		-.0870	-.7260	-.1240	-.0670			-.0760		-.2070				
75.000	1.1200		-.2160	-.6750	-.1880	.0190			-.0420		-.2570	-.7000	-.4270	-.1670	-.1560
90.000	1.1200	.4090	-.3530	-.6300	-.1600	.0490			-.0370		-.3160	-.8440	-.2610	-.0970	-.0920
105.000	1.1200														
110.000	1.1200														
125.000	1.1200		-.4610	-.6150	-.0480	.1120			-.0810		-.4810	-.7010	-.2380	-.0450	-.0440
135.000	1.1200														
142.000	1.1200									-.8070					
150.000	1.1200		-.4410	-.6250	.0080	.3030			-.0820		-.7230	-.5740	-.3530	-.0110	-.0160
157.000	1.1200							.1560							
162.000	1.1200								-.2920						
165.000	1.1200										-.5880	-.5690	-.2140	-.0440	-.0310
169.000	1.1200								-.2360						
172.000	1.1200						.5590								
180.000	1.1200	.3200	-.4660	-.5530	.0310	.5100			.0850		-1.0980	-.5090	-.3630	-.1480	-.1140

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1680							-.1750		-.1610
40.000	.1330	.1640		.0880	-.0040	-.1700	-.2700			-.2200
70.000		-.3760	-.5580	-.3680	-.3340	-.5630	-.6400	-.1770		
90.000		-.3090	-.4050	-.3550	-.4380	-.5410	-.6100	-.2850		
105.000				-.3240	-.4820	-.5380	-.6030	-.4270		
110.000									-.2610	
120.000		-.2100	-.1290	-.1940	-.5800	-.6300	-.5750	-.5710	-.2050	
135.000				.3280	-.0620	-.6330	-.5210	-.4860		
150.000		-.1580	-.0450	.1240	-.1390	-.5240	-.5390	-.4200		
165.000		-.1490		.0880	.0040	-.4880	-.4940	-.2630		
180.000		-.1990	-.0790	-.0150						

AMES 11-7X7 OA12 O2A ORBITER FUSELAGE (RBPB15) (01 MAY 73)

REFERENCE DATA

SREF = 2.4219 SQ.FT. XMRP = 28.5350 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 15.000 RUDDER = -20.000
ELEVON = .000 RUDFLR = .000

MACH (1) = .600 BETA (1) = -8.040

SECTION 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.8940	.9730	.0000	-.1070	.1470	.1540			.1390		.1200	.1160	.1340	.1550	.1850
20.000	.8940		.4030	.0010	.1580	.1780			.1660		.1330				
40.000	.8940		.5140	.1520	.2490	.2310			.2150		.1340	.1120	.1670	.2030	.2490
50.000	.8940		.4720	.1210	.2070	.1450			.1110		.0340				
70.000	.8940		.3420	.0220	.0730	.1300			.0900		-.0400	-.3770	-.2070	-.1640	-.2780
90.000	.8940	.7010	.0990	-.1350	.0650	.1000			.0640		-.1330	-.5790	-.2960	-.2570	-.2750
105.000	.8940														
110.000	.8940														
120.000	.8940		-.0480	-.2610	-.0100	.0890			.2020		-.5720	-.5570	-.3700	-.3440	-.3490
135.000	.8940														
142.000	.8940									-.5470					
150.000	.8940		-.4510	-.3720	-.0710	.2500			-.2620		-.9680	-.3110	-.2160	-.1840	-.2360
157.000	.8940							.1880							
162.000	.8940								-.4480						
165.000	.8940										-.5350	-.2540	-.1860	-.1850	-.2470
169.000	.8940								-.6930						
172.000	.8940						.4040								
180.000	.8940	-.0990	-.7080	-.2460	-.0990	.3130			-.2630		-.6630	-.2530	-.3380	-.2710	-.1570

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1960							-.0500		-.1310
40.000	.2780	.2550		.0970	.0170	-.0720	-.0610			-.1160
70.000		-.6460	-.4710	-.3330	-.1300	-.1420	-.0860	-.0850		
90.000		-.3710	-.2450	-.1220	-.0670	-.1030	-.1030	-.1020		
105.000				.0830	-.0650	-.1340	-.1200	-.1340		
110.000									-.2200	
120.000		-.3370	-.0720	.3330	-.0970	-.1800	-.1130	-.1000	-.1580	
135.000				-.0330	-.2970	-.3660	-.2550	-.2590		
150.000		-.2090	-.0700	-.0860	-.3600	-.2080	-.1490	-.2110		
165.000		-.2140		-.0500	-.0620	-.1390	-.1380	-.2250		
180.000		-.1610	-.0840	-.0960						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 CEA ORBITER FUSELAGE (RBPB15)

MACH (1) = .399 BETA (2) = -3.970

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9250	.9180	.8060	-.0800	.1750	.1770			.1590		.1380	.1360	.1550	.1720	.2010
20.000	.9250		.3890	-.0050	.1850	.1860			.1770		.1400				
40.000	.9250		.4170	.0720	.2080	.2060			.1780		.0600	.0300	.1040	.1670	.2270
60.000	.9250		.3330	-.0140	.1010	.0330			.0110		-.0560				
75.000	.9250		.1720	-.1280	-.0390	.0550			.0180		-.1160	-.4490	-.2640	-.2190	-.3390
90.000	.9250	.5820	-.0710	-.2660	.0060	.0430			.0010		-.1950	-.6200	-.3160	-.2730	-.2830
105.000	.9250														
110.000	.9250														
120.000	.9250		-.3630	-.3260	-.0400	.0670			.1180		-.5750	-.5170	-.3200	-.2870	-.2840
135.000	.9250									-.5900					
142.000	.9250								-.3150		-.8720	-.2850	-.1910	-.1620	-.1730
150.000	.9250		-.5090	-.4280	-.0510	.2590		.1620							
157.000	.9250								-.5130						
162.000	.9250										-.5210	-.2300	-.1870	-.1110	-.1800
165.000	.9250								-.6890						
169.000	.9250						.4330								
172.000	.9250								-.2290		-.5870	-.1900	-.1570	-.1610	-.1070
180.000	.9250	-.0920	-.6950	-.2390	-.0590	.3650									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2080							-.0490		-.1370
40.000	.2580	.2490		.1090	.0230	-.0700	-.0710			-.1240
75.000		-.6340	-.5060	-.3990	-.2180	-.2750	-.1940	-.1530		
90.000		-.4310	-.3270	-.2520	-.2110	-.2300	-.1830	-.1600		
105.000				-.0720	-.2020	-.2370	-.2030	-.1870		
110.000									-.2500	
120.000		-.2870	-.0520	.2050	-.2370	-.2540	-.1660	-.1440	-.1650	
135.000				.1210	-.2400	-.3340	-.2340	-.2380		
150.000		-.1930	-.0460	-.0220	-.2620	-.2560	-.2040	-.2390		
165.000		-.1830		-.0220	-.0290	-.2260	-.2160	-.2390		
180.000		-.1160	-.0440	-.0370						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7D7 OA12 OBA ORBITER FUSELAGE (RBPB15)

MACH (1) = .600 BETA (3) = .100

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.9520	.9150	.0660	-.0880	.1730	.1750			.1620		.1380	.1290	.1470	.1710	.2090
20.000	.9520		.3140	-.0390	.1740	.1770			.1660		.1240				
40.000	.9520		.2850	-.0370	.1480	.1450			.1010		-.0560	-.0940	.0050	.0920	.1840
55.000	.9520		.1650	-.1580	-.0030	-.0720			-.0840		-.1410				
70.000	.9520		-.0230	-.2760	-.1420	-.0150			-.0520		-.1750	-.5070	-.3110	-.2620	-.3900
90.000	.9520	.4450	-.2500	-.3840	-.0520	-.0100			-.0590		-.2480	-.6390	-.3190	-.2690	-.2790
105.000	.9520														
110.000	.9520														
120.000	.9520		-.4690	-.4120	-.0590	.0410			.0190		-.5530	-.4650	-.2660	-.2220	-.2110
135.000	.9520									-.6280					
142.000	.9520								-.3700		-.7690	-.2590	-.1560	-.1480	-.1750
150.000	.9520		-.5580	-.4640	-.0430	.2440		.1110							
157.000	.9520								-.5890						
162.000	.9520										-.5280	-.2270	-.1690	-.0810	-.1200
165.000	.9520								-.7000						
169.000	.9520						.4290								
172.000	.9520								-.2160		-.5650	-.1730	-.1160	-.0830	-.0840
180.000	.9520	-.0380	-.6770	-.2370	-.0460	.3820									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2110							-.0540		-.1370
40.000	.2280	.2270		.1080	.0330	-.0710	-.0740			-.1410
70.000		-.6270	-.5270	-.4530	-.2940	-.3370	-.2320	-.1840		
90.000		-.4680	-.3820	-.3750	-.3600	-.3040	-.2450	-.1960		
105.000				-.2880	-.2940	-.3100	-.2600	-.2280		
110.000									-.2680	
120.000		-.2410	-.0590	-.1010	-.4130	-.3310	-.2200	-.1850	-.2120	
135.000				.2070	-.2130	-.3320	-.2310	-.2240		
150.000		-.2220	-.0920	.1620	-.2370	-.3370	-.3070	-.2990		
165.000		-.1350		.0340	.0800	-.2780	-.2780	-.2620		
180.000		-.1130	-.0310	-.0340						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB15)

MACH (1) = .598 BETA (4) = 4.180

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1906	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9380	.9280	.0000	-.0950	.1670	.1720			.1570		.1290	.1330	.1480	.1650	.2010
20.000	.9380		.2330	-.0810	.1480	.1510			.1410		.1000				
40.000	.9380		.1430	-.1480	.0550	.0490			-.0100		-.1990	-.2240	-.1040	.0180	.1330
59.000	.9380		-.0220	-.3150	-.1210	-.1810			-.1780		-.2180				
79.000	.9380		-.2260	-.4220	-.2290	-.0730			-.1100		-.2250	-.5360	-.3280	-.2900	-.4050
98.000	.9380	.2900	-.4480	-.5020	-.1030	-.0530			-.1070		-.2720	-.6280	-.2990	-.2540	-.2790
105.000	.9380														
118.000	.9380														
125.000	.9380		-.6410	-.5150	-.1800	.0110			-.0780		-.5210	-.4040	-.2050	-.1610	-.1720
133.000	.9380														
142.000	.9380									-.6520					
151.000	.9380		-.6120	-.4780	-.0610	.1960			-.4400		-.6690	-.2180	-.1180	-.0970	-.1240
157.000	.9380							.0110							
162.000	.9380								-.7080						
165.000	.9380										-.5370	-.1920	-.1520	-.0720	-.1030
169.000	.9380								-.7360						
172.000	.9380						.3910								
180.000	.9380	-.0400	-.6680	-.2640	-.0520	.3640			-.2320		-.5830	-.1770	-.1590	-.1490	-.1130

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2030							-.0480		-.1290
40.000	.1880	.2090		.1100	.0400	-.0660	-.0730			-.1460
79.000		-.6130	-.5200	-.4790	-.3380	-.3440	-.2390	-.1960		
98.000		-.4850	-.4280	-.4850	-.4100	-.3480	-.2580	-.2060		
105.000				-.4120	-.3960	-.3510	-.2720	-.2430		
118.000									-.2780	
125.000		-.2470	-.1220	-.2920	-.3700	-.3870	-.2820	-.2170	-.2310	
133.000				.2130	-.1770	-.3740	-.2650	-.2350		
138.000		-.1580	-.1050	.2500	-.1380	-.3630	-.3050	-.2890		
165.000		-.1220		.1030	.0440	-.3720	-.3130	-.2360		
180.000		-.1150	-.0360	-.0250						

DATE 17 SEP 79 TABULATED PRESSURE DATA - OA12A

AMES 11-7ft OA12 OEA ORBITER FUSELAGE (RBPB15)

MACH (1) = .999 BETA (5) = 6.260

SECTION : 1:ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1335	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.8860	.8800	.0000	-.1150	.1420	.1490			.1370		.1130	.1130	.1270	.1440	.1890
25.000	.8860		.1720	-.1290	.1000	.1190			.1070		.0640				
40.000	.8860		.0690	-.2590	-.0490	-.0670			-.1470		-.3780	-.3890	-.2470	-.0750	.0670
55.000	.8860		-.1870	-.4510	-.2320	-.2830			-.2660		-.3100				
70.000	.8860		-.4090	-.5580	-.3050	-.1230			-.1610		-.2740	-.5610	-.3660	-.3210	-.4220
90.000	.8860	.1410	-.6220	-.6170	-.1570	-.0820			-.1500		-.3040	-.6250	-.2900	-.2390	-.2880
105.000	.8860														
110.000	.8860														
120.000	.8860		-.7410	-.6070	-.1170	-.0270			-.1620		-.5020	-.3650	-.1740	-.1490	-.1900
135.000	.8860									-.7040					
142.000	.8860								-.5050		-.6060	-.2020	-.1070	-.0810	-.1110
150.000	.8860		-.6920	-.5270	-.1000	.1250		-.1200							
157.000	.8860								-.8530						
162.000	.8860										-.5600	-.1800	-.1320	-.0820	-.1260
165.000	.8860								-.7810						
169.000	.8860						.3040								
172.000	.8860								-.2810		-.6400	-.2350	-.3210	-.2890	-.1650
180.000	.8850	-.0860	-.6980	-.2820	-.0970	.3030									

X/LB	.5873	.6626	.7381	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1820							-.0510		-.1350
40.000	.1310	.1650		.1080	.0400	-.0620	-.0770			-.1430
70.000		-.6020	-.5170	-.5110	-.3790	-.3720	-.2590	-.1990		
90.000		-.3160	-.4850	-.5570	-.4540	-.3820	-.2860	-.2310		
105.000				-.5330	-.4510	-.3970	-.3090	-.2670		
110.000									-.2780	
120.000		-.3200	-.1630	-.3410	-.7830	-.4770	-.3100	-.2640	-.2620	
135.000				.3270	-.2240	-.4610	-.3350	-.2740		
150.000		-.1650	-.0450	.1510	-.2420	-.5020	-.4080	-.3460		
165.000		-.1640		.0540	-.0370	-.5230	-.4410	-.2480		
180.000		-.1620	-.0920	-.0910						

AMES 11-7U7 OA12 OEA ORBITER FUSELAGE (RBPB15)

MACH (2) = .901 BETA (1) = -8.120

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0840	.9870	.0000	-.1570	.1800	.1930			.1710		.1270	.1000	.1180	.1470	.2230
20.000	1.0840		.4970	-.0350	.2110	.2120			.1350		.1440				
40.000	1.0840		.5990	.1290	.2850	.2770			.2560		.1610	.1070	.1470	.2020	.2920
55.000	1.0840		.5840	.1210	.2460	.2190			.1970		.1160				
70.000	1.0840		.4470	.0250	.1050	.2170			.1930		.0550	-.5320	-.3430	-.1280	-.1640
90.000	1.0840	.8470	.2180	-.1680	.1270	.2050			.1970		-.0420	-.7110	-.4840	-.2150	-.1600
105.000	1.0840														
110.000	1.0840														
120.000	1.0840		-.1300	-.3530	.0380	.2250			.3780		-.4130	-.9160	-.5590	-.2840	-.2470
135.000	1.0840														
142.000	1.0840									-.5110					
150.000	1.0840		-.3430	-.6440	-.0010	.4300			.0730		-.9260	-.6090	-.4700	-.1210	-.1300
157.000	1.0840							.4430							
162.000	1.0840								-.0490						
165.000	1.0840										-.6380	-.5070	-.3790	-.0840	-.1480
169.000	1.0840								-.3190						
172.000	1.0840						.6170								
180.000	1.0840	.1510	-.6320	-.7010	-.0050	.4810			.0150		-1.0840	-.6260	-.3990	-.0870	-.0960

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2470							-.1680		-.1680
40.000	.3310	.3200		.1480	.0330	-.1410	-.2030			-.1740
70.000		-.5920	-.8900	-.5030	-.3100	-.5540	-.5790	-.1810		
90.000		-.3810	-.6080	-.0410	-.2330	-.4060	-.5760	-.1520		
105.000				.1440	-.1360	-.3590	-.5030	-.2920		
110.000									-.2740	
120.000		-.4580	-.0780	.4880	-.0820	-.4330	-.5140	-.1080	-.1590	
135.000				.0710	-.2550	-.7880	-.3720	-.1940		
150.000		-.2920	-.0550	-.0360	-.3500	-.4210	-.2120	-.2300		
165.000		-.2780		-.0110	-.0560	-.3410	-.1870	-.2610		
180.000		-.2250	-.0800	-.0660						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7D7 OA12 O2A ORBITER FUSELAGE (RBPB15)

MACH (2) = .900 BETA (2) = -4.010

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1110	1.0200	.0000	-.1200	.2100	.2210			.1910		.1510	.1210	.1340	.1720	.2450
20.000	1.1110		.4760	-.0350	.2280	.2320			.2110		.1530				
40.000	1.1110		.5050	.0490	.2500	.2610			.2300		.1060	.0430	.0870	.1690	.2700
55.000	1.1110		.4300	-.0340	.1440	.1250			.1120		.0340				
70.000	1.1110		.2870	-.1500	-.0060	.1540			.1290		-.0190	-.5870	-.4290	-.1670	-.2320
90.000	1.1110	.7320	.0500	-.3130	.0630	.1570			.1430		-.1240	-.7610	-.5860	-.2180	-.1590
105.000	1.1110														
110.000	1.1110								.2900		-.4880	-.9450	-.4460	-.1900	-.1000
120.000	1.1110		-.2630	-.5170	.0390	.2200									
135.000	1.1110									-.6510					
142.000	1.1110								.0560		-.9170	.5560	-.4440	-.1160	-.1670
150.000	1.1110		-.4250	-.6670	.0570	.4370		.4250							
157.000	1.1110								-.0810						
162.000	1.1110										-.8210	-.3850	-.4210	-.1620	-.1130
165.000	1.1110								-.2860						
169.000	1.1110						.6330								
172.000	1.1110								-.4620		-1.0810	-.5110	-.2600	-.0420	-.0240
180.000	1.1110	.1430	-.6420	-.1320	.0510	.5140									
X/LB	.5973	.6526	.7380	.7869	.8293	.8846	.9262	.9639	1.0015	1.0392					
PHI															
.000	.2680							-.1760		-.1570					
40.000	.3190	.3250		.1670	.0640	-.1230	-.1890			-.1880					
70.000		-.6210	-.8750	-.4120	-.4650	-.6320	-.7460	-.2000							
90.000		-.4210	-.5900	-.2420	-.4320	-.3670	-.6600	-.5610							
105.000				.0120	-.3010	-.4470	-.6050	-.5640							
110.000									-.2580						
120.000		-.3730	-.0380	.3840	-.1970	-.5600	-.5300	-.4560	-.1460						
135.000				.2270	-.1890	-.7280	-.4380	-.3470							
150.000		-.2410	-.0280	-.0080	-.2290	-.5270	-.3190	-.2950							
165.000		-.2380		.0390	-.0560	-.4330	-.3060	-.2440							
180.000		-.2030	-.0830	-.0480											

AMES 11-707 OA12 CEA ORBITER FUSELAGE (RBP015)

MACH (2) = .899 BETA (3) = .090

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0802	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.1150	1.0290	.0000	-.1340	.2100	.2170			.1920		.1500	.1180	.1380	.1710	.2480
20.000	1.1150		.4100	-.0960	.2110	.2190			.1960		.1410				
40.000	1.1150		.3830	-.0790	.1790	.2030			.1590		.0690	-.0490	-.0020	.1030	.2350
55.000	1.1150		.2870	-.2140	.0310	.0310			.0230		-.0520				
75.000	1.1150		.1140	-.3470	-.0910	.0890			.0630		-.0950	-.0430	-.0230	-.0140	-.0890
90.000	1.1150	.6280	-.1100	-.5410	.0110	.1130			.0850		-.2070	-.0090	-.0840	-.0890	-.0650
105.000	1.1150														
110.000	1.1150														
125.000	1.1150		-.3690	-.5940	.0500	.2000			.1950		-.5540	-.0950	-.0290	-.0930	-.0840
135.000	1.1150														
142.000	1.1150									-.7830					
150.000	1.1150		-.4770	-.5870	.0840	.4000			.0150		-.9430	-.0900	-.0840	-.0360	-.1160
157.000	1.1150							.3520							
162.000	1.1150								-.1460						
165.000	1.1150										-.9370	-.0460	-.0940	.0260	-.0510
169.000	1.1150								-.2540						
172.000	1.1150						.5730								
180.000	1.1150	.1610	-.6420	-.5910	.0820	.5060			.0580		-.8070	-.0490	-.1570	.0020	-.0270

X/LB	.5873	.6626	.7380	.7889	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2730							-.1940		-.1680
40.000	.2830	.3040		.1700	.0740	-.1140	-.1910			-.1940
70.000		-.5750	-.7890	-.4180	-.4550	-.6060	-.7430	-.3500		
90.000		-.4400	-.5380	-.3650	-.5090	-.5820	-.6380	-.5910		
105.000				-.2020	-.3920	-.5830	-.5970	-.6190		
110.000									-.2580	
120.000		-.2750	-.0650	.1260	-.3370	-.6390	-.5440	-.5150	-.1450	
135.000				.2390	-.1460	-.6150	-.4800	-.4120		
150.000		-.2220	-.0510	.1440	-.1380	-.5450	-.4760	-.4140		
165.000		-.2010		.0640	.0240	-.4620	-.4080	-.2690		
180.000		-.1800	-.0480	-.0100						

AMES 11-7D7 OA12 O2A ORBITER FUSELAGE (RBPB15)

MACH (2) = .899 BETA (4) = 4.210

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0970	1.0060	.0000	-.1390	.2010	.2110			.1900		.1390	.1190	.1280	.1680	.2360
25.000	1.0970		.3450	-.1380	.1790	.1960			.1810		.1200				
45.000	1.0970		.2570	-.2110	.0880	.1210			.0720		-.1220	-.1600	-.1090	.0300	.1810
55.000	1.0970		.1290	-.4200	-.0810	-.0720			-.0590		-.1360				
75.000	1.0970		-.0570	-.5950	-.1660	.0340			.0670		-.1620	-.6890	-.5940	-.1860	-.3050
90.000	1.0970	.4900	-.2630	-.6630	-.0110	.0780			.0330		-.2570	-.8410	-.3910	-.1540	-.1590
105.000	1.0970														
110.000	1.0970														
125.000	1.0970		-.4730	-.6250	.0100	.1690			.0630		-.5720	-.9370	-.2910	-.0810	-.0850
135.000	1.0970														
142.000	1.0970									-.8940					
150.000	1.0970		-.5370	-.6030	.0520	.3520			-.0370		-.5990	-.5570	-.2700	-.0480	-.0480
157.000	1.0970							.2650							
162.000	1.0970								-.2300						
165.000	1.0970										-.6010	-.5850	-.3360	.0350	-.1270
169.000	1.0970								-.2704						
172.000	1.0970						.5690								
180.000	1.0970	.2010	-.6430	-.6120	.0620	.5240			.0350		-1.0570	-.5070	-.2780	-.0460	-.0520

X/LB	.5873	.6628	.7397	.7869	.8283	.8848	.9268	.9639	1.0015	1.0392
PHI										
.000	.2630							-.1890		-.1630
45.000	.2410	.2740		.1710	.0770	-.1050	-.1890			-.2010
75.000		-.5390	-.7150	-.4360	-.4090	-.6640	-.7350	-.2510		
90.000		-.4340	-.5350	-.4640	-.5700	-.6340	-.6580	-.3720		
105.000				-.3670	-.5030	-.6080	-.6420	-.4470		
110.000									-.2720	
125.000		-.2560	-.1590	-.2430	-.5120	-.6740	-.6180	-.5070	-.2060	
135.000				.2050	-.1320	-.6260	-.5680	-.4720		
150.000		-.1990	-.0640	.2180	-.0290	-.5120	-.5120	-.4210		
165.000		-.1730		.1110	.0570	-.4220	-.4390	-.2610		
180.000		-.1950	-.0860	-.0360						

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBPB15)

MACH (2) = .890 BETA (5) = 8.340

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.0710	.9990	.0000	-.1500	.1780	.1930			.1720		.1250	.1010	.1090	.1430	.2170
20.000	1.0710		.2880	-.1780	.1340	.1650			.1490		.0860				
40.000	1.0710		.1490	-.3170	-.0150	.0120			-.0550		-.2860	-.3030	-.2330	-.0910	.1170
55.000	1.0710		-.0530	-.5960	-.2190	-.1610			-.1350		-.2140				
70.000	1.0710		-.1950	-.6690	-.3010	-.0100			-.0420		-.2200	-.7040	-.6450	-.3010	-.3390
90.000	1.0710	.3700	-.3980	-.6930	-.1910	.0530			-.0160		-.2990	-.8580	-.3880	-.1500	-.1740
105.000	1.0710														
110.000	1.0710														
120.000	1.0710		-.5840	-.5940	-.1810	.1230			-.0200		-.5260	-.8550	-.2920	-.0630	-.1030
135.000	1.0710														
142.000	1.0710									-.8190					
150.000	1.0710		-.8280	-.6640	-.0250	.3070			-.0970		-.7050	-.5950	-.3630	-.0060	-.0430
157.000	1.0710							.1690							
162.000	1.0710								-.3240						
165.000	1.0710										-.5760	-.5950	-.3360	.0070	-.0450
169.000	1.0710								-.2960						
172.000	1.0710						.5240								
180.000	1.0710	.1560	-.6560	-.7020	-.0120	.4710			.0030		-1.0320	-.5430	-.4160	-.0930	-.0990

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2410							-.1600		-.1610
40.000	.1830	.2250		.1610	.0760	-.1030	-.1860			-.2190
70.000		-.5180	-.7070	-.4580	-.4210	-.6650	-.7960	-.3970		
90.000		-.4530	-.6140	-.5360	-.6370	-.6060	-.7450	-.6720		
105.000				-.4510	-.5670	-.6020	-.7320	-.6330		
110.000									-.2510	
120.000		-.2950	-.2240	-.3050	-.5750	-.6030	-.6730	-.6650	-.2100	
135.000				.3420	-.0610	-.6820	-.6010	- 5800		
150.000		-.1990	-.0610	.1350	-.1290	-.5640	-.5470	-.5000		
165.000		-.1890		.0800	-.0010	-.5020	-.4860	-.2950		
180.000		-.2190	-.0890	-.0470						

AMES 11-7?? OA12 OPA ORBITER FUSELAGE (RBPB16) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 20.000 RUDDER = -20.000
ELEVON = .000 RUDFLR = .000

MACH (1) = .599 BETA (1) = -7.990

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0071	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3908	.5120
PHI															
.000	.7730	.9630	.0000	.1030	.2560	.2570			.2390		.2160	.2190	.2230	.2510	.2850
20.000	.7730		.6150	.2240	.3000	.2900			.2820		.2440				
40.000	.7730		.6560	.3020	.3550	.3300			.3010		.1850	.1280	.2120	.2830	.3460
55.000	.7730		.5450	.1920	.1930	.0670			.0470		-.0110				
75.000	.7730		.3870	.0020	-.0340	.0860			.0500		-.0830	-.0070	-.0180	-.0280	-.0530
90.000	.7730	.5970	.0040	-.2240	-.0170	.0190			.0030		-.2030	-.2080	-.0540	-.0390	-.0500
105.000	.7730														
110.000	.7730														
125.000	.7730		-.4410	-.4150	-.1130	-.0190			.1870		-.7570	-.7010	-.5160	-.4830	-.4580
135.000	.7730									-.6050					
142.000	.7730										-1.1160	-.3670	-.2690	-.2600	-.2780
150.000	.7730		-.6760	-.5570	-.1710	.1850			-.3610						
157.500	.7730							.1090							
162.000	.7730								-.5520						
165.000	.7730										-.5890	-.0910	-.2350	-.2490	-.2950
159.000	.7730								-.8200						
172.000	.7730						.3410								
180.000	.7730	-.3810	-.9190	-.3380	-.1480	.2710			-.3520		-.6440	-.2560	-.4090	-.1760	-.1310
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	.2930							-.0020		-.1170					
40.000	.3930	.3710		.2010	.1130	-.0010	-.0140			-.1160					
75.000		-.9600	-.7630	-.6170	-.3880	-.3200	-.2410	-.2170							
90.000		-.6590	-.5880	-.5340	-.4100	-.3310	-.2420	-.2000							
105.000				-.1190	-.2900	-.3000	-.2530	-.2280							
110.000									-.2930						
125.000		-.3890	-.1100	.2520	-.1980	-.2580	-.1620	-.1240	-.1650						
135.000				-.0520	-.3650	-.4310	-.3010	-.2900							
150.000		-.2540	-.1110	-.1000	-.4040	-.2640	-.1940	-.2570							
165.000		-.2710		-.0940	-.1040	-.2300	-.2040	-.2680							
180.000		-.2190	-.1490	-.1570											

AMES 11-707 OA12 OEA ORDITER FUSELAGE (RBPB16)

MACH (1) = .598 BETA (2) = -3.950

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI														
.000	.7860	1.0030	.0000	.1380	.3020	.2790		.2610		.2340	.2280	.2460	.2670	.3010
25.000	.7860		.5950	.2090	.3080	.2930		.2830		.2430				
45.000	.7860		.5570	.2200	.2870	.2620		.2190		.0560	-.0020	.1170	.2140	.3050
55.000	.7860		.3940	.0440	.0620	-.0810		-.0750		-.1140				
70.000	.7860		.1580	-.1510	-.1570	-.1010		-.0320		-.1620	-.5080	-.3770	-.3240	-.6700
90.000	.7860	.4740	-.1710	-.3570	-.0910	-.0380		-.0610		-.2660	-.7580	-.4750	-.3980	-.3680
105.000	.7860													
110.000	.7860													
120.000	.7860		-.5590	-.4730	-.1500	-.0230		.1230		-.7490	-.6440	-.4490	-.3990	-.3640
135.000	.7860													
142.000	.7860								-.6600					
150.000	.7860		-.7130	-.5970	-.1320	.2080		-.3910		-.9840	-.3250	-.2580	-.2340	-.2640
157.000	.7850						.1050							
162.000	.7850							-.6010						
165.000	.7860									-.5480	-.2580	-.2180	-.1460	-.2440
169.000	.7850							-.8150						
172.000	.7860						.3680							
180.000	.7850	-.3670	-.8980	-.3260	-.1100	.3200		-.3250		-.5680	-.1890	-.1670	-.1450	-.0980

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3110							-.0090		-.1350
40.000	.3520	.3560		.2090	.1200	.0000	-.0180			-.1330
70.000		-.9540	-.7570	-.6110	-.3850	-.3280	-.2320	-.2140		
90.000		-.7500	-.6890	-.6500	-.5080	-.3580	-.2680	-.2220		
105.000				-.3150	-.4030	-.3430	-.2810	-.2510		
110.000									-.3170	
120.000		-.3440	-.0910	.0800	-.3760	-.3340	-.2150	-.1810	-.2070	
135.000				.1180	-.2810	-.3820	-.2530	-.2590		
150.000		-.2530	-.0900	.0140	-.2840	-.2950	-.2360	-.2830		
165.000		-.2560		-.0650	-.0540	-.3030	-.2790	-.2950		
180.000		-.1480	-.0690	-.0700						

AMES 11-7X7 OA12 O2A ORBITER FUSELAGE (RBPB16)

MACH (1) = .601 BETA (3) = .150

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.8590	1.0040	.0000	.1360	.2990	.2770			.2640		.2380	.2330	.2440	.2730	.3070
20.000	.8590		.5280	.1650	.2920	.2740			.2570		.2190				
40.000	.8590		.4230	.1190	.1920	.1620			.0980		-.1150	-.1650	-.0170	.1260	.2510
55.000	.8590		.2250	-.1190	-.0640	-.2070			-.1650		-.2220				
70.000	.8590		-.0310	-.3180	-.2640	-.0730			-.0980		-.2280	-.5770	-.4310	-.3800	-.7190
90.000	.8590	.3460	-.3470	-.4740	-.1400	-.0770			-.1050		-.3100	-.7730	-.4680	-.3970	-.3850
105.000	.8590														
110.000	.8590														
120.000	.8590		-.6500	-.5500	-.1390	-.0110			.0400		-.7110	-.5630	-.3690	-.3090	-.2740
135.000	.8590														
140.000	.8590									-.6840					
150.000	.8590		-.7560	-.5300	-.1910	.2480			-.4370		-.9640	-.2910	-.2130	-.2420	-.3320
157.000	.8590							.0730							
162.000	.8590								-.6680						
165.000	.8590										-.5210	-.2910	-.1750	-.0870	-.1450
169.000	.8590								-.8110						
172.000	.8590						.3690								
180.000	.8590	-.3320	-.8900	-.3250	-.0850	.3350			-.3160		-.5110	-.1640	-.1100	-.0930	-.0140
X/B	.0000	.0028	.0628	.7380	.7869	.8243	.8848	.9262	.9639	1.0015	1.0392				
PHI															
.000	.3150								-.0180		-.1240				
40.000	.3110	.3250		.2140	.1250	.1050	-.0200				-.1510				
75.000		-.9150	-.7490	-.6160	-.4230	-.3380	-.2250	-.2110							
90.000		-.8050	-.7530	-.7890	-.5840	-.3390	-.2830	-.2450							
105.000				-.5610	-.4940	-.3820	-.3110	-.2870							
110.000									-.3580						
120.000		-.3150	-.1560	-.2110	-.6110	-.4170	-.2800	-.2340	-.2650						
135.000				.2160	-.2560	-.3700	-.2550	-.2420							
150.000		-.3000	-.1330	.1660	-.3090	-.4190	-.3610	-.3590							
165.000		-.1950		.0100	.0470	-.3120	-.3200	-.3150							
180.000		-.1460	-.0680	-.0750											

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBPB16)

MACH (1) = .597 BETA (4) = 4.200

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.8310	.9870	.0000	.1200	.2890	.2700			.2540		.2290	.2190	.2390	.2560	.3030
20.000	.8310		.4510	.1140	.2600	.2390			.2220		.1870				
40.000	.8310		.2830	-.0270	.0780	.0180			-.0630		-.3160	-.3570	-.1770	.0200	.1830
55.000	.8310		.0430	-.2940	-.2110	-.3450			-.3100		-.3200				
70.000	.8310		-.2310	-.4750	-.3670	-.1410			-.1700		-.2860	-.6290	-.4640	-.4250	-.7410
90.000	.8310	.2020	-.5380	-.5830	-.1950	-.1180			-.1550		-.3430	-.7760	-.4450	-.3830	-.4020
108.000	.8310														
110.000	.8310														
120.000	.8310		-.7820	-.6540	-.1460	-.0180			-.0450		-.6670	-.4850	-.2930	-.2420	-.2380
135.000	.8310														
142.000	.8310									-.7110					
150.000	.8310		-.8130	-.4330	-.1070	.1810			-.4920		-.7480	-.2440	-.1520	-.1510	-.2170
157.000	.8310							.1030							
162.000	.8310								-.7830						
165.000	.8310										-.5400	-.2150	-.1430	-.0740	-.1300
169.000	.8310								-.8420						
172.000	.8310						.3360								
180.000	.8310	-.2890	-.8870	-.3330	-.1070	.3190			-.3320		-.5710	-.1710	-.1710	-.1510	-.1070

X/LB	.5973	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3040							-.0130		-.1220
40.000	.2490	.2900		.2020	.1310	.0070	-.0250			-.1540
70.000		-.8550	-.7000	-.6610	-.4440	-.3650	-.2270	-.1820		
90.000		-.8290	-.7810	-.8550	-.6410	-.4430	-.2730	-.2270		
108.000				-.7350	-.5890	-.4300	-.3170	-.2800		
110.000									-.3650	
120.000		-.3650	-.2220	-.6180	-.8320	-.5060	-.3370	-.2830	-.2890	
135.000				.0630	-.1870	-.4200	-.2960	-.2780		
150.000		-.2200	-.0550	.2930	-.1300	-.4120	-.3390	-.3320		
165.000		-.1580		.0960	.0510	-.3930	-.3480	-.2990		
180.000		-.1440	-.0670	-.0760						

AMES 11-707 OA12 C2A ORBITER FUSELAGE (RBPB16)

MACH (1) = .604 BETA (5) = 8.320

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.7700	.9400	.6440	.1080	.2690	.2530			.2370		.2150	.2140	.2270	.2470	.2830
20.000	.7700		.3760	.0630	.2100	.2020			.1920		.1540				
40.000	.7700		.1440	-.1790	-.0480	-.1230			-.2350		-.5340	-.5550	-.3370	-.0920	.1110
55.000	.7700		-.1140	-.3	-.3430	-.4720			-.4040		-.4550				
70.000	.7700		-.4290	-.6010	-.4380	-.1990			-.2150		-.3320	-.6480	-.4940	-.4730	-.7410
90.000	.7700	.9430	-.7020	-.7410	-.2250	-.1330			-.1830		-.3660	-.7520	-.4200	-.3490	-.47
105.000	.7700														
110.000	.7700														
120.000	.7700		-.8310	-.7280	-.1510	-.0350			-.1130		-.6110	-.4350	-.2420	-.2040	-.2540
135.000	.7700														
140.000	.7700									-.7030					
150.000	.7700		-.8360	-.4	-.1220	-.1460			.5430		-.6570	-.2370	-.1	-.1030	-.1440
157.500	.7700							-.1010							
162.000	.7700								-.8930						
165.000	.7700										-.5080	-.1940	-.1190	-.0890	-.1370
180.000	.7700								-.8860						
180.000	.7700						.2610								
180.000	.7700	-.9430	-.9430	-.4	-.24	-.1960			.2000		-.6100	.0270	-.4120	-.1860	-.1570

X/LB	.6071	.6626	.7324	.7 99	.8	.8	.9262	.9634	1.0115	1.0392
PHI										
.000	.2020							-.0180	-.1150	
40.000	.1910	.0440		.1920	.1310	.0110	-.0270		-.1220	
70.000		-.8290	-.7060	-.6530	-.48	-.3760	-.2320	-.1840		
90.000		-.8440	-.7750	-.9280	-.7150	-.4380	-.291	-.2150		
105.000				-.9240	-.6470	-.4510	-.33	-.2940		
110.000									-.3550	
120.000		-.4650	-.3720	-.5990	-1.0810	-.5920	-.3890	-.3320	-.3270	
135.000				.3480	-.2210	-.4930	-.3520	-.2990		
150.000		-.2170	-.0850	.1110	-.2730	-.5120	-.4280	-.3840		
165.000		-.2210		.0270	-.0520	-.4970	-.4470	-.2920		
180.000		-.2160	-.1480	-.1610						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBPB16)

MACH (2) = .898 BETA (1) = -8.060

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0073	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9720	1.0840	.0000	.1160	.3200	.3080			.2860		.2540	.2330	.2450	.2680	.3350
20.000	.9720		.6990	.2320	.3460	.3410			.3260		.2800				
40.000	.9720		.7420	.3360	.4010	.3890			.3660		.2500	.1930	.2440	.3050	.3950
55.000	.9720		.6480	.2370	.2490	.1630			.1650		.1210				
75.000	.9720		.4640	.0590	.0230	.1030			.1800		.0670	-.4600	-.3470	-.3030	-.4420
90.000	.9720	.7680	.1640	-.2120	.0390	.1370			.1700		-.0420	-.6940	-.5890	-.4410	-.2160
105.000	.9720														
115.000	.9720														
120.000	.9720		-.2820	-.5070	-.0880	.1380			.4010		-.6220	-1.0060	-.7540	-.3060	-.2810
135.000	.9720									-.5160					
142.000	.9720								.0650		-1.0790	-.7270	-.4940	-.2190	-.1770
150.000	.9720		-.5190	-.7020	-.1060	.3840		.3960							
157.000	.9720								-.1010						
162.000	.9720										-.6510	-.5200	-.4640	-.1360	-.2220
165.000	.9720								-.3800						
169.000	.9720						.5520								
172.000	.9720								-.0620		-1.0420	-.6640	-.3130	-.0640	-.0980
180.000	.9720	-.0360	-.7990	-.6220	-.1010	.4270									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3500							-.0990		-.1650
40.000	.4410	.4400		.2600	.1500	-.0250	-.0890			-.2210
75.000		-.8500	-.9780	-.6750	-.8560	-.7960	-.5310	-.4770		
90.000		-.5870	-.8020	-.5010	-.7870	-.5860	-.5650	-.3980		
105.000				-.0190	-.5440	-.5610	-.5420	-.4010		
115.000									-.3880	
120.000		-.4650	-.1630	.4120	-.2240	-.5720	-.4470	-.1770	-.2590	
135.000				-.0100	-.3450	-.9230	-.5670	-.2410		
150.000		-.2940	-.1000	-.0740	-.3620	-.6510	-.3410	-.2420		
165.000		-.2060		-.0350	-.1050	-.5900	-.3470	-.2960		
180.000		-.3050	-.1680	-.0930						

AMES 11-FT 07 OA12 02A ORBITER FUSELAGE (RBPB16)

MACH (2) = .897 BETA (2) = -3.980

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.9910	1.1070	.0000	.1370	.3410	.3300			.3070		.2710	.2480	.2580	.2840	.3440
20.000	.9910		.6670	.2170	.3490	.3430			.3290		.2760				
40.000	.9910		.6410	.2390	.3300	.3300			.2950		.1460	.0930	.1570	.2400	.3570
55.000	.9910		.5070	.0680	.1150	.0320			.0530		.0270				
75.000	.9910		.2990	-.1230	-.1070	.1100			.1120		-.0030	-.5550	-.4250	-.4030	-.5920
90.000	.9910	.6620	-.1460	-.4010	-.0310	.0930			.1180		-.1110	-.7670	-.6570	-.2260	-.2450
105.000	.9910														
110.000	.9910														
120.000	.9910		-.4050	-.6300	-.0980	.1540			.3200		-.6670	-.9810	-.4510	-.1790	-.1550
135.000	.9910														
140.000	.9910									-.6270					
150.000	.9910		-.5940	-.5420	-.0530	.3980			.6010		-1.0650	-.6200	-.4800	-.2790	-.1640
157.500	.9910							.4020							
162.000	.9910								-.1270						
165.000	.9910										-.7750	-.4280	-.4300	-.0010	-.1720
168.000	.9910								-.3530						
172.000	.9910						.5690								
180.000	.9910	-.0470	-.6440	-.5220	-.1410	.4320			-.0170		-.8690	-.5490	-.2220	-.0060	-.0680

X/LB	.5973	.6626	.7360	.7969	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3510							-.0990		-.1780
40.000	.4140	.4290		.2760	.1720	-.0090	-.0820			-.2450
75.000		-.8280	-.9980	-.6170	-.6170	-.5080	-.5310	-.4970		
90.000		-.6750	-.9060	-.6850	-.8320	-.7580	-.5180	-.4010		
105.000				-.2610	-.5410	-.7280	-.4350	-.4070		
110.000									-.3870	
120.000		-.3520	-.1190	.2860	-.2820	-.7120	-.4610	-.2290	-.2880	
135.000				.2140	-.2440	-.7870	-.5920	-.2050		
150.000		-.2760	-.1080	.0160	-.2290	-.6570	-.4520	-.2620		
165.000		-.3670		.0090	-.0870	-.6270	-.4400	-.2770		
180.000		-.2780	-.1430	-.0760						

AMES 11-7U7 OA12 OBA ORBITER FUSELAGE (RBPB16)

MACH (2) = .897 BETA (3) = .090

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.0250	1.1180	.8000	.1350	.3470	.3310			.3130		.2690	.2530	.2640	.2920	.3490
20.000	1.0250		.6150	.1780	.3440	.3270			.3160		.2630				
40.000	1.0250		.5320	.1290	.2460	.2410			.1900		.0690	-.0320	.0520	.1620	.3130
55.000	1.0250		.3630	-.0920	-.0130	-.0930			-.0460		-.0640				
70.000	1.0250		.1400	-.2960	-.2110	.0450			.0500		-.0710	-.6210	-.5220	-.2780	-.6900
90.000	1.0250	.5570	-.1540	-.5080	-.0810	.0610			.0770		-.1780	-.8190	-.7380	-.2240	-.2740
105.000	1.0250														
110.000	1.0250														
120.000	1.0250		-.5025	-.6740	-.0520	.1550			.2440		-.6590	-1.0100	-.4530	-.1610	-.1200
135.000	1.0250														
142.000	1.0250									-.7420					
150.000	1.0250		-.6450	-.5680	-.0720	.3570			-.0210		-1.0240	-.6040	-.4060	-.1390	-.2240
157.000	1.0250							.3240							
162.000	1.0250								-.1570						
165.000	1.0250										-.8580	-.4680	-.3270	.0360	-.0840
169.000	1.0250								-.2890						
172.000	1.0250						.4330								
180.000	1.0250	-.0290	-.8020	-.4870	-.1240	.3830			-.0100		-.7840	-.5360	-.1480	.0120	-.0390

X/LB	.5873	.6626	.7380	.7889	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
.000	.3780							-.0980		-.1800
40.000	.3750	.4070		.2830	.1800	.0030	-.0820			-.2600
75.000		-.7580	-.9550	-.6200	-.5740	-.5240	-.4960	-.4880		
90.000		-.6800	-.9050	-.8250	-.9230	-.7290	-.5050	-.4390		
105.000				-.4180	-.8110	-.7930	-.4240	-.4640		
110.000									-.4800	
120.000		-.3050	-.1800	.0100	-.3820	-.6020	-.4480	-.3480	-.3560	
135.000				.2370	-.1880	-.6690	-.5610	-.2650		
150.000		-.2930	-.1170	.1480	-.1630	-.6350	-.5720	-.3730		
165.000		-.2770		.0310	.0210	-.5380	-.5050	-.3380		
180.000		-.2260	-.1120	-.0660						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 OBA ORBITER FUSELAGE (OBPB16)

MACH (2) = .896 BETA (4) = 4.240

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0270	1.1080	.0000	.1210	.3320	.3210			.3090		.2650	.2440	.2540	.2790	.3430
20.000	1.0270		.5450	.1250	.3050	.2940			.2860		.2350				
40.000	1.0270		.4070	.0090	.1400	.1200			.0550		-.1750	-.1950	-.0740	.0650	.2460
55.000	1.0270		.2110	-.2590	-.1760	-.2190			-.1490		-.1650				
70.000	1.0270		-.0250	-.4720	-.2990	-.0100			-.0130		-.1350	-.6760	-.6170	-.3020	-.6970
90.000	1.0270	.4310	-.2940	-.7010	-.1350	.0350			.0260		-.2370	-.8550	-.7410	-.1890	-.2830
105.000	1.0270														
110.000	1.0270														
120.000	1.0270		-.5010	-.6450	-.1100	.1510			.1300		-.6540	-.9510	-.4460	-.1620	-.1360
135.000	1.0270									-.7690					
142.000	1.0270								-.0820		-.9970	-.5400	-.2200	-.0660	-.1010
150.000	1.0270		-.6990	-.5290	-.1330	.2880		.2030							
157.000	1.0270								-.2720						
162.000	1.0270										-.9350	-.4810	-.2550	.0290	-.0530
165.000	1.0270								-.3080						
169.000	1.0270						.4520								
172.000	1.0270								-.0310		-.9390	-.5240	-.2420	-.0340	-.0710
180.000	1.0270	-.0060	-.6690	-.5500	-.0770	.4330									

X/LB	.5873	.6626	.7380	.7869	.8223	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3690							-.0980		-.1780
20.000	.3170	.3660		.2760	.1850	.0050	-.0810			-.2520
40.000		-.7120	-.8800	-.6660	-.6110	-.4130	-.4820	-.4700		
70.000		-.7070	-.8840	-.8950	-.9880	-.4220	-.4200	-.4270		
90.000				-.5910	-.7330	-.6990	-.4140	-.4640		
105.000									-.3990	
110.000									-.3860	
120.000		-.3380	-.2370	-.3230	-.5430	-.8550	-.3100	-.3840		
135.000				.1240	-.1940	-.6340	-.5440	-.3430		
150.000		-.3090	-.1790	.2770	-.1260	-.5740	-.5590	-.3860		
165.000		-.2300		.1120	.1010	-.3660	-.3930	-.3460		
180.000		-.2650	-.1310	-.0740						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB16)

MACH (2) = .899 BETA (5) = 8.370

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9830	1.0890	.0000	.1180	.3240	.3040			.2950		.2540	.2270	.2410	.2590	.3270
25.000	.9830		.4870	.0810	.2580	.2580			.2500		.2030				
40.000	.9830		.2930	-.0990	.0220	-.0180			-.0980		-.3770	-.3930	-.2100	-.0510	.1740
55.000	.9830		.0690	-.4150	-.3060	-.3430			-.2400		-.2870				
75.000	.9830		-.1750	-.6370	-.4460	-.0520			-.0640		-.1960	-.7000	-.6980	-.3410	-.6000
90.000	.9830	.3180	-.4290	-.7020	-.2720	.0290			-.0130		-.2720	-.8720	-.7290	-.1850	-.3230
105.000	.9830														
110.000	.9830														
120.000	.9830		-.6920	-.5570	-.2730	.1260			.0180		-.5910	-.9990	-.3550	-.1870	-.1910
135.000	.9830									-.8430					
142.000	.9830														
150.000	.9830		-.7390	-.5580	-.1790	.2730			-.1140		-.6710	-.5820	-.2880	-.0170	-.0700
157.000	.9830							.1650							
162.000	.9830								-.3470						
165.000	.9830										-.6150	-.6070	-.3140	.0270	-.0480
180.000	.9830								-.3450						
172.000	.9830						.4670								
180.000	.9830	-.0290	-.7940	-.6370	-.0810	.4250			-.0670		-.9770	-.5980	-.3490	-.0680	-.0880

X/LB	.5873	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3470							-.1170		-.1640
40.000	.2490	.3080		.2680	.1790	.0060	-.0880			-.2260
75.000		-.6710	-.8360	-.6430	-.5950	-.4020	-.5470	-.4110		
90.000		-.7070	-.8810	-.9010	-1.0080	-.3590	-.3710	-.3990		
105.000				-.6970	-.7660	-.6750	-.4040	-.4360		
110.000									-.4880	
120.000		-.4240	-.3630	-.5300	-.6670	-.8910	-.4970	-.3590	-.4260	
135.000				.3310	.0420	-.6640	-.6110	-.4240		
150.000		-.2390	-.1440	.1850	-.1130	-.5450	-.5280	-.5110		
165.000		-.2380		.0990	.0070	-.4800	-.4040	-.3480		
180.000		-.2750	-.1800	-.0850						

AMES 11-7W7 OA12 OBA ORBITER FUSELAGE (RBPB17) (01 MAY 73)

REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000
ELEVON = 10.000 RUDFLR = .000

MACH (1) = .597 BETA (1) = -10.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PHI															
.000	.9420	.3500	.0[illegible]	-.7380	-.1620	-.0800			-.0790		-.0870	-.0820	-.0640	-.0400	-.023[illegible]
25.000	.9420		-.3560	-.6710	-.2330	-.1200			-.1190		-.1270				
40.000	.9420		-.0320	-.4230	-.1950	-.3000			-.3060		-.3330	-.2550	-.1830	-.1030	-.0510
55.000	.9420		.0540	-.1690	.0500	.0690			.0610		.0420				
70.000	.9420		.2770	-.0290	.1490	.1580			.1080		-.1050	-.2630	-.0070	.0610	.0310
90.000	.9420	.8680	.3310	.0470	.2000	.1860			.1230		-.0210	-.3110	-.0210	.0370	.0180
105.000	.9420														
110.000	.9420														
120.000	.9420		.3240	.1470	.2710	.2870			.1910		-.1490	-.2340	-.0610	-.0260	-.0210
135.000	.9420														
142.000	.9420									-.2510					
150.000	.9420		.2150	.1230	.2350	.4550			.0690		-.5340	-.1760	-.0900	-.0570	-.0420
157.000	.9420							.4320							
162.000	.9420								-.0500						
165.000	.9420										-.3360	-.1420	-.0680	-.0310	-.0160
169.000	.9420								-.2270						
172.000	.9420						.5700								
180.000	.9420	.5300	-.0550	.0100	.1110	.4250			.0580		-.6170	-.2690	-.2560	-.3440	-.2760

X/LB	5973	.6626	.7380	.7969	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0290							-.0660		-.1510
40.000	-.0560	-.1120		-.1140	-.1310	-.0640	-.1840			-.1510
70.000		-.0830	-.1010	-.0660	.0330	-.1030	-.0920	-.0920		
90.000		-.0500	-.0180	.0270	.0240	-.1050	-.0940	-.1090		
105.000				.1310	-.0690	-.1050	-.1050	-.1280		
115.000									-.2160	
120.000		-.0490	.1060	.3420	-.0900	-.1070	-.0560	-.0660	-.1490	
135.000				.2290	-.0300	-.1320	-.0680	-.1150		
150.000		-.0390	.0740	.0650	-.1530	-.0530	-.0290	-.1420		
165.000		-.0070		.1320	.1060	.0520	-.0060	-.2280		
180.000		-.2090	-.1390	-.1030						

AP 13 11-707 OA12 ORA ORBITER FUSELAGE (RBPB17)

MACH (1) = .990 BETA (2) = .080

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0198	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3206	.3953	.5120
PHI															
.000	1.0240	.4330	.0000	-.7010	-.1020	-.0350			-.0390		-.0510	-.0450	-.0230	-.0070	.0090
20.000	1.0240		-.4190	-.6240	-.1230	-.0420			-.0440		-.0670				
40.000	1.0240		-.2610	-.4910	-.1120	-.0730			-.0830		-.1310	-.1000	-.0400	-.0110	.0170
55.000	1.0240		-.1860	-.3970	-.0460	-.0100			-.0320		-.0970				
70.000	1.0240		-.1370	-.3410	-.0440	.0060			-.0410		-.1410	-.3720	-.0920	-.0150	-.0350
90.000	1.0240	.5530	-.1210	-.2950	-.0650	-.0050			-.0700		-.1710	-.4250	-.0920	-.0190	-.0270
105.000	1.0240														
110.000	1.0240														
120.000	1.0240		-.0280	-.1320	.0680	.0650			-.1450		-.2470	-.2710	-.0860	-.0310	-.0240
135.000	1.0240														
142.000	1.0240									-.4450					
150.000	1.0240		.0470	.0110	.1580	.3280			-.1570		-.4570	-.1710	-.0800	-.0390	-.0150
157.000	1.0240							.2090							
162.000	1.0240								-.2870						
165.000	1.0240										-.4160	-.1560	-.0780	-.0350	-.0190
169.000	1.0240								-.2830						
172.000	1.0240						.6040								
180.000	1.0240	.5920	.0080	.0720	.1920	.5400			.1430		-.5030	-.1390	-.1030	-.0470	-.0210

X/LB	.5873	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0070							-.0680		-.1410
40.000	.0240	-.0330		-.0550	-.0740	-.0140	-.1120			-.1340
70.000		-.1630	-.2180	-.2260	-.1360	-.2440	-.1990	-.1550		
90.000		-.1120	-.1270	-.1680	-.1870	-.2470	-.1940	-.1650		
105.000				-.1480	-.2350	-.2440	-.2150	-.1980		
110.000									-.2420	
120.000		-.0580	.0550	-.0310	-.4760	-.2960	-.1900	-.1710	-.2130	
135.000				.3910	-.0910	-.2800	-.1840	-.1850		
150.000		-.0190	.0970	.2300	-.0160	-.2220	-.1890	-.2120		
165.000		-.0160		.1890	.1090	-.1680	-.2090	-.1970		
180.000		-.0130	.0640	.0960						

AMES 11-7D7 OA12 C2A ORBITER FUSELAGE (RBFB17)

MACH (1) = .600 BETA (3) = 10.370

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.9350	.3670	.0000	-.7380	-.1480	-.0780			-.0770		-.0900	-.0700	-.0520	-.0440	-.0280
20.000	.9350		-.5650	-.6910	-.1340	-.0650			-.0610		-.0960				
40.000	.9350		-.5710	-.6450	-.1490	-.0700			-.0860		-.1730	-.1400	-.0810	-.0540	-.0390
55.000	.9350		-.5890	-.6920	-.1530	-.0960			-.1250		-.1640				
70.000	.9350		-.6110	-.6850	-.1770	-.1050			-.1500		-.2170	-.3970	-.1060	-.0360	-.0440
90.000	.9350	.1320	-.6120	-.6300	-.1800	-.1600			-.2210		-.2570	-.4110	-.1970	-.0370	-.0370
105.000	.9350														
110.000	.9350														
125.000	.9350		-.4490	-.4560	-.1960	-.2120			-.5070		-.3040	-.2960	-.1240	-.0620	-.0390
135.000	.9350														
142.000	.9350									-1.0080					
150.000	.9350		-.2180	-.2210	-.0680	.0130			-.4550		-.4360	-.2220	-.1310	-.0740	-.0630
157.000	.9350							-.2500							
162.000	.9350								-.7100						
165.000	.9350										-.4920	-.1990	-.1820	-.1700	-.1540
180.000	.9350								-.4510						
172.000	.9350						.3820								
180.000	.9350	.5310	-.0490	-.0670	.0960	.4090			.0190		-.5970	-.2490	-.2210	-.2730	-.2500

X/LB	.5873	.6626	.7330	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0320							-.0700		-.1560
40.000	.0080	-.0230		-.0340	-.0430	.0160	-.0450			-.1490
70.000		-.2000	-.3020	-.3480	-.2520	-.3310	-.2700	-.2560		
90.000		-.1490	-.2130	-.3250	-.3250	-.3570	-.2870	-.2210		
105.000				-.3690	-.4420	-.3870	-.3080	-.2690		
110.000									-.2910	
120.000		-.1100	-.0600	-.4120	-.9210	-.4850	-.3370	-.2880	-.2940	
135.000				.3710	-.3200	-.6540	-.4530	-.3680		
150.000		-.1390	-.0620	.0660	-.0910	-.4530	-.3660	-.2880		
165.000		-.1780		.0620	-.0310	-.5990	-.4900	-.2340		
180.000		-.2350	-.1520	-.0790						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBPB17)

MACH (2) = .901 BETA (1) = -10.120

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.1180	.5490	.0000	-.8020	-.1770	-.0520			-.0960		-.1520	-.1550	-.0870	-.0340	.0010
25.000	1.1180		-.1000	-.7960	-.2300	-.1040			-.1290		-.1950				
40.000	1.1180		.1610	-.4940	-.2490	-.3040			-.3480		-.4300	-.4720	-.1970	-.1050	-.0280
55.000	1.1180		.2900	-.1860	.0620	.1000			.0780		-.0130				
75.000	1.1180		.3910	-.0390	.1720	.2110			.1420		.0030	-.6040	.0190	.0830	.0720
90.000	1.1180	.9080	.4150	.0420	.2540	.2550			.1670		-.0090	-.7240	.0240	.0630	.0570
105.000	1.1180														
110.000	1.1180														
120.000	1.1180		.3930	.1570	.3250	.3830			.2680		-.1090	-.7860	-.0140	.0060	.0200
135.000	1.1180									-.1990					
142.000	1.1180										-.5410	-.5990	-.0400	-.0220	.0010
150.000	1.1180		.2810	.1410	.2900	.5790			.2820						
157.000	1.1180							.5990							
162.000	1.1180								.1710						
165.000	1.1180										-.5590	-.4940	.0060	.0670	.0320
169.000	1.1180								-.0320						
172.000	1.1180						.7370								
180.000	1.1180	.7020	-.0040	.0260	.1490	.5760			.2660		-1.0870	-.5660	-.3290	-.2840	-.1960

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0050							-.1130		-.1690
40.000	-.0210	-.1190		-.1650	-.2010	-.0530	-.2540			-.1920
75.000		-.0390	-.1130	-.0500	.0440	-.2290	-.2160	-.0560		
90.000		-.0130	-.0160	.0690	.0140	-.2550	-.1730	-.0480		
105.000				.1760	-.0290	-.2640	-.1580	-.0730		
110.000									-.2410	
120.000		-.0330	.1270	.4170	-.1200	-.2430	-.0760	-.0360	-.1500	
135.000				.3110	.0050	-.1590	-.0220	-.0540		
150.000		-.0140	.1330	.1350	-.1270	-.0270	.0240	-.1110		
165.000		.0200		.1990	.1330	.0630	.0480	-.2560		
180.000		-.1330	-.0210	.0290						

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBPB17)

MACH (2) = .899 BETA (2) = .0E0

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3266	.3953	.5125
PHI															
.000	1.1770	.5970	.0000	-.5960	-.3390	-.0110			-.0530		-.1100	-.1060	-.0440	.0020	.0340
20.000	1.1770		-.1760	-.6870	-.2330	-.0230			-.0590		-.1250				
40.000	1.1770		-.0630	-.7510	-.0970	-.0640			-.1120		-.2080	-.2490	-.0460	.0080	.0430
55.000	1.1770		-.0130	-.6930	-.0090	.0230			-.0440		-.1480				
70.000	1.1770		-.0010	-.5780	.0630	.0500			-.0470		-.1930	-.6980	-.0480	.0240	.0640
90.000	1.1770	.7020	-.0110	-.4860	.0370	.0620			-.0590		-.2340	-.8090	-.0700	.0180	.0410
105.000	1.1770														
110.000	1.1770														
120.000	1.1770		.0350	-.2060	.1100	.1740			-.0770		-.3720	-.8230	-.0190	.0160	.0240
135.000	1.1770														
142.000	1.1770									-1.0580					
150.000	1.1770		.0830	-.0210	.2060	.4700			.1350		-.7690	-.4430	-.0330	.0110	.0170
157.000	1.1770							.4050							
162.000	1.1770								.0010						
165.000	1.1770										-.8690	-.4420	.0130	.0240	.0210
180.000	1.1770								-.0170						
172.000	1.1770						.7680								
180.000	1.1770	.7050	.0190	.0650	.2430	.6790			.3230		-1.1650	-.3240	-.0140	.0120	.0180

X/LB	.5873	.6625	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0340							-.1350		-.1410
40.000	.0550	-.0190		-.1070	-.1540	-.0400	-.2270			-.1250
70.000		-.0930	-.1590	-.1940	-.1470	-.4130	-.5510	-.1660		
90.000		-.0550	-.0600	-.1120	-.2240	-.4320	-.5100	-.1450		
105.000				-.0630	-.2980	-.4430	-.4910	-.1650		
110.000									-.2590	
120.000		-.0170	.1080	.0750	-.4610	-.4920	-.3930	-.1660	-.2160	
135.000				.4430	-.0190	-.5050	-.3080	-.2310		
150.000		.0090	.1470	.2950	.0410	-.3740	-.2510	-.2750		
165.000		.0140		.2470	.1490	-.2730	-.2300	-.2390		
180.000		.0130	.1150	.1580						

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBPB17)

MACH (2) = .953 BETA (3) = 10.490

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0802	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.1440	.5640	.0000	-.8120	-.2430	-.0500			-.0810		-.1500	-.1470	-.0770	-.0370	-.0040
25.000	1.1440		-.2960	-.7490	-.3390	-.0310			-.0660		-.1690				
40.000	1.1440		-.3010	-.7070	-.3220	-.0260			-.0840		-.2760	-.2740	-.0950	-.0330	.0140
55.000	1.1440		-.3130	-.6630	-.3500	-.0340			-.1170		-.3150				
70.000	1.1440		-.3780	-.6590	-.3560	-.0360			-.1310		-.4460	-.7660	-.0770	.0140	.0040
90.000	1.1440	.3580	-.3840	-.6770	-.2510	-.0770			-.2220		-.5350	-.5140	-.0830	.0250	.0190
105.000	1.1440														
110.000	1.1440														
120.000	1.1440		-.2880	-.6420	-.1840	-.0950			-.3940		-.6920	- 4700	-.1620	.0230	.0150
135.000	1.1440														
142.000	1.1440									-1.2570					
150.000	1.1440		-.1250	-.2770	-.0340	.1910			-.1230		-.7450	-.5710	-.2060	-.0340	-.0070
157.000	1.1440							.0380							
162.000	1.1440								-.2660						
165.000	1.1440										-.8040	-.5490	-.2210	-.1040	-.0980
189.000	1.1440								-.0950						
172.000	1.1440						.5610								
180.000	1.1440	.6430	.0050	.0040	.1470	.5610			.2400		-.9640	-.5890	-.2830	-.2460	-.1780

X/LB	.5873	.8626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0050							-.1090		-.1680
40.000	.0340	-.0080		-.0630	-.0950	.0010	-.1110			-.1900
70.000		-.0910	-.1570	-.2460	-.2440	-.5350	-.6470	-.3340		
90.000		-.0820	-.0740	-.1950	-.3370	-.5480	-.6020	-.5260		
105.000				-.1720	-.4700	-.5610	-.6000	-.6220		
110.000									-.2510	
120.000		-.0290	.0080	-.1090	-.6760	-.6530	-.5910	-.6210	-.2770	
135.000				.4990	.0040	-.7740	-.7730	-.6320		
150.000		-.1220	-.0280	.0340	-.1250	-.5230	-.6450	-.4990		
165.000		-.1230		.1340	.0890	-.5260	-.5700	-.2810		
180.000		-.1400	-.0150	.0360						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB18) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000
ELEVON = 10.000 RUDFLR = .000

MACH (1) = .599 BETA (1) = -10.070

SECTION 1)ORBITER FUSELAGE DEPENDENT VARIABLE C[illegible]

x/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1591	.1732	.1958	.2259	.2711	.3234	.3953	.5123
PHI															
.000	.9970	.5490	.0000	-.5090	-.0710	-.0160			-.0260		-.0370	-.0270	-.0690	-.0[illegible]	-.0[illegible]
20.000	.0970		-.0720	-.4350	-.1020	-.0290			-.0310		-.0480				
40.000	.9670		.1310	-.2010	-.0130	-.0730			-.0610		-.1[illegible]	-.0660	-.0[illegible]	-.0[illegible]	-.0[illegible]
55.000	.9970		.3220	-.0720	.1580	.1070			.1360		.0530				
70.000	.9970		.3560	.0440	.1820	.1870			.1380		.0130	-.2730	-.0620	-.0[illegible]	-.0[illegible]
90.000	.9970	.2040	.3110	.0870	.2150	.1990			.1410		-.0[illegible]240	-.3640	-.1[illegible]780	-.1[illegible]060	-.1[illegible]0[illegible]
105.000	.9970														
110.000	.9970														
120.000	.9970		.1780	.0390	.2080	.2470			.2240		-.2660	-.3280	-.1[illegible]50	-.1[illegible]160	-.1[illegible]3[illegible]
135.000	.9970														
148.000	.9970									-.3470					
150.000	.9970		.0600	-.0310	.1290	.2910			-.0390		-.6910	-.2720	-.1330	-.1110	-.1[illegible]
157.000	.9970							.3460							
160.000	.9970								-.1890						
165.000	.9970										-.3940	-.1870	-.1070	-.0790	-.0[illegible]60
169.000	.9970								-.4020						
172.000	.9970						.5010								
180.000	.9970	.3270	-.2740	-.1270	.0160	.3740			-.0670		-.6610	-.2850	-.3320	-.4270	-.3[illegible]1
x/LB	.5073	.6626	.7380	.7969	.8283	.9848	.9262	.9639	1.0013	1.0392					
PHI															
.000	.0410							-.0520		-.1380					
40.000	.0720	.0290		-.0230	-.0600	-.0180	-.1460			-.1330					
70.000		-.2140	-.1830	-.1030	.0240	-.0970	-.0830	-.0770							
90.000		-.1710	-.0970	.0060	.0270	-.1150	-.0880	-.0960							
105.000				.1350	.0010	-.1100	-.1060	-.1220							
110.000									-.1990						
120.000		-.1700	.0250	.3700	-.0810	-.1290	-.0720	-.0670	-.1420						
135.000				.0940	-.1460	-.2140	-.1300	-.1550							
150.000		-.1130	.0010	-.0290	-.2570	-.1110	-.0640	-.1580							
165.000		-.0810		.0430	.0370	-.0030	-.0390	-.2240							
180.000		-.2190	-.1560	-.1270											

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB18)

MACH (1) = .596 BETA (2) = .0U0

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	1.0330	.6040	.0000	-.4750	-.0260	.0240			.0130		-.0060	.0020	.0220	.0370	.0620
20.000	1.0330		-.1430	-.4250	-.0310	.0230			.0130		-.0180				
40.000	1.0330		-.0480	-.3270	-.0120	.0250			.0090		-.0600	-.0520	.0070	.0320	.0760
55.000	1.0330		-.0380	-.3020	.0050	.0260			-.0110		-.0780				
75.000	1.0330		-.0760	-.2870	-.0340	.0210			-.0260		-.1360	-.3060	-.1280	-.0670	-.1190
90.000	1.0330	.5490	-.1460	-.2980	.0120	.0220			-.0420		-.1720	-.4680	-.1280	-.0730	-.1060
105.000	1.0330														
110.000	1.0330														
125.000	1.0330		-.1620	-.2010	.0480	.0810			-.0710		-.3220	-.3150	-.1250	-.0730	-.0780
135.000	1.0330														
142.000	1.0330									-.5110					
150.000	1.0330		-.1440	-.1260	.0970	.2970			-.2320		-.5610	-.2040	-.1040	-.0630	-.0550
157.000	1.0330							.1710							
162.000	1.0330								-.4040						
165.000	1.0330										-.4630	-.1810	-.1020	-.0620	-.0520
169.000	1.0330								-.4360						
172.000	1.0330						.3460								
180.000	1.0330	.3880	-.2310	-.0760	.0970	.4850			.0130		-.5400	-.1580	-.1180	-.0640	-.0550

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0680							-.0440		-.1310
40.000	.0940	.0680		.0200	-.0120	.0310	-.0770			-.1220
75.000		-.3030	-.3150	-.2780	-.1490	-.2530	-.1940	-.1510		
90.000		-.2280	-.2010	-.1960	-.2030	-.2570	-.1980	-.1660		
105.000				-.1610	-.2340	-.2630	-.2180	-.1930		
110.000									-.2410	
125.000		-.1340	.0080	.0140	-.4320	-.2950	-.1860	-.1610	-.2020	
135.000				.3440	-.1320	-.2930	-.1860	-.1780		
150.000		-.0770	.0440	.1590	-.0850	-.2560	-.2040	-.2200		
165.000		-.0700		.1220	.0440	-.2060	-.2060	-.1960		
180.000		-.0620	.0140	.0240						

AMES 11-7U7 OA12 OBA ORBITER FUSELAGE (RBPB18)

MACH (1) = .998 BETA (3) = 10.300

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X_B	.0[illegible]	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
[illegible]	.9750	.5480	.0000	-.5250	-.0700	-.0180			-.0240		-.0430	-.0270	-.0100	-.0030	.0290
2[illegible]	.9750		-.3170	-.5010	-.0730	-.0290			-.0300		-.0640				
4[illegible]	.9750		-.3780	-.5180	-.1200	-.0690			-.1070		-.2300	-.2180	-.1460	-.0770	-.0610
55.000	.9750		-.4700	-.5920	-.1620	-.1270			-.1420		-.1890				
7[illegible]	.9750		-.5520	-.6370	-.2040	-.1090			-.1450		-.2210	-.4420	-.1650	-.1090	-.1270
9 [illegible]	.9750	.1180	-.6310	-.6250	-.1450	-.1120			-.1910		-.2560	-.4660	-.1270	-.0790	-.0360
1.5.000	.9750														
11.[illegible]	.9750														
12[illegible]	.9750		-.3460	-.4950	-.1500	-.1400			-.3970		-.3510	-.2950	-.1130	-.0620	-.0640
135.[illegible]	.9750														
144.[illegible]	.9750									-1.0200					
15[illegible]	.9750		-.3910	-.3240	-.1010	.0410			-.4970		-.4760	-.2210	-.1320	-.0840	-.0850
157.[illegible]	.9750							-.2390							
168.000	.9750								-.8040						
165.[illegible]	.9750										-.5020	-.2060	-.1610	-.1370	-.1410
180.000	.9750								-.5930						
1[illegible]	.9750						.3360								
19.[illegible]	.9750	.3420	-.2760	-.1440	-.0[illegible]	.354			-.1120		-.6570	-.3600	-.2540	-.4210	-.2350
X_B	.6[illegible]	.6020	.738[illegible]	.7961	.8293	.8848	.9262	.9639	1.0015	1.0392					
PHI															
0[illegible]	.0362							-.0500		-.1470					
4[illegible]	.0362	.0360		.0230	.0680	.0540	-.0170			-.1470					
7[illegible]		-.3380	-.4080	-.4220	-.2990	-.3730	-.2840	-.2180							
9[illegible]		-.2510	-.2910	-.3740	-.3650	-.3810	-.2970	-.2370							
105.[illegible]				-.3620	-.4540	-.3880	-.3190	-.2640							
110.000									-.2840						
120.[illegible]		-.1720	-.1850	-.3550	-.8580	-.4870	-.3330	-.2840	-.2910						
135.000				.3640	-.2450	-.5600	-.3830	-.3140							
150.000		-.1470	-.0740	.0380	-.2980	- 5880	-.4470	-.3500							
165.000		-.1730		.0190	-.0810	-.6440	-.4630	-.2610							
180.000		-.2290	-.1550	-.1270											

AMES 11-7X7 OA12 OEA ORBITER FUSELAGE (RBPB10)

MACH (2) = .899 BETA (1) = -10.190

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0004	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1380	.7090	.0000	-.7870	-.0190	.0120			-.0190		-.0670	-.0920	-.0500	.0070	.0580
25.000	1.1360		.0950	-.6040	-.0910	-.0050			-.0250		-.0860				
40.000	1.1360		.3190	-.2700	-.0100	-.0640			-.0950		-.1830	-.2040	-.0570	.0170	.0820
55.000	1.1360		.4200	-.0610	.1870	.2100			.1730		.0620				
75.000	1.1360		.4430	.0220	.2210	.2480			.1910		.0380	-.5640	-.0620	.0420	.0070
90.000	1.1360	.9770	.3850	.0220	.2580	.2790			.2110		.0270	-.7070	-.0680	.0010	-.0130
105.000	1.1360														
110.000	1.1360														
120.000	1.1360		.2480	.0340	.2550	.3550			.3300		-.1790	-.8250	-.0920	-.0770	-.0690
135.000	1.1360														
142.000	1.1360									-.3360					
150.000	1.1360		.0840	-.0410	.1840	.5260			.2130		-.7120	-.6920	-.0920	-.0640	-.0390
157.000	1.1360							.5440							
162.000	1.1360								.0890						
165.000	1.1360										-.5630	-.5510	-.0490	-.0300	.0000
159.000	1.1360								-.1580						
172.000	1.1360						.6870								
180.000	1.1360	.4930	-.2260	-.1700	.0690	.5380			.1760		-1.1440	-.4910	-.4320	-.3170	-.1520

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0720							-.0930		-.1550
40.000	.1020	.0480		-.0370	-.0980	.0050	-.2190			-.1580
75.000		-.2090	-.3220	-.1430	-.0030	-.1790	-.2130	-.0310		
90.000		-.1800	-.1980	.1230	-.0420	-.2040	-.1610	-.0310		
105.000				.1270	-.0750	-.2440	-.1460	-.0590		
110.000									-.2100	
120.000		-.1890	.0030	.4080	-.1730	-.2620	-.0670	-.0240	-.1370	
135.000				.1970	-.1090	-.1550	-.0590	-.0840		
150.000		-.1180	.0490	.0300	-.2480	-.0760	-.0120	-.1310		
165.000		-.0810		.0930	.0390	-.0190	.0010	-.2410		
180.000		-.1650	-.0500	-.0210						

AMES 11-7X7 OA12 OPA ORBITER FUSELAGE (RBPB10)

MACH (2) = .901 BETA (2) = .080

SECTION / 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1710	.7820	.0000	-.5810	.0260	.0470			.0230		-.0460	-.0640	-.0250	.0410	.0880
25.000	1.1710		.0140	-.6050	.0220	.0460			.0210		-.0600				
40.000	1.1710		.0850	-.5960	.0300	.0560			.0180		-.1130	-.1600	-.0590	.0440	.0990
55.000	1.1711		.0850	-.5670	.0560	.0810			.0230		-.1130				
70.000	1.1711		.0470	-.4810	.0310	.0920			.0180		-.1750	-.6640	-.1380	-.0170	-.0540
90.000	1.1711	.7004	-.0360	-.4570	.0760	.1120			.0170		-.2140	-.7920	-.1810	-.0100	-.0380
105.000	1.1711														
110.000	1.1711														
120.000	1.1711		-.0940	-.3710	.1150	.2070			.0280		-.4320	-.8990	-.1140	-.0410	-.0170
135.000	1.1711														
142.000	1.1711									-.9810					
150.000	1.1711		-.1090	-.2730	.1510	.4560			.0970		-.8280	-.5440	-.0450	.0480	.0660
157.000	1.1711							.3980							
162.000	1.1711								-.0570						
165.000	1.1711										-.8960	-.4750	-.0660	.0280	.0070
169.000	1.1711								-.1200						
178.000	1.1711						.7300								
180.000	1.1711	.5340	-.2150	-.1630	.1640	.6370			.2290		-1.2250	-.3940	-.0110	.0110	.0020

X/LB	.5473	.6526	.7394	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1140							-.1260		-.1270
40.000	.1340	.1060		.0180	-.0420	.0270	-.1700			-.1220
70.000		-.2850	-.3210	-.2600	-.1770	-.4670	-.6130	-.1370		
90.000		-.2170	-.1910	-.1520	-.2850	-.4820	-.5970	-.1080		
105.000				-.1000	-.3340	-.4990	-.6010	-.1460		
110.000									-.2360	
120.000		-.1330	.0240	.0800	-.4400	-.5580	-.5080	-.1210	-.1900	
135.000				.3250	-.0840	-.5770	-.4240	-.1770		
150.000		-.0750	.0620	.2100	-.0530	-.4760	-.3820	-.2460		
165.000		-.0670		.1650	.0700	-.3830	-.3490	-.2200		
180.000		-.0610	.0370	.0850						

AMES 11-7U7 OA12 OPA ORBITER FUSELAGE (RBPB16)

MACH (2) = .895 BETA (3) = 10.420

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0440	.0075	.0188	.0339	.0602	.1355	.1506	.1561	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1110	.7180	.0000	-.7390	-.0090	.0120			-.0140		-.0780	-.0060	-.0460	.0000	.0350
25.000	1.1110		-.1170	-.6970	.0140	.0140			-.0190		-.0920				
40.000	1.1110		-.1700	-.7200	-.0410	-.0120			-.0670		-.2630	-.2870	-.2080	-.0690	.0310
55.000	1.1110		-.2440	-.7190	-.1630	-.0370			-.0960		-.2540				
70.000	1.1110		-.3440	-.6900	-.2670	-.0670			-.1020		-.3380	-.7310	-.1630	-.0680	-.0480
90.000	1.1110	.3540	-.4050	-.6490	-.2520	-.0080			-.1330		-.4060	-.7570	-.1590	-.0240	-.0290
105.000	1.1110														
110.000	1.1110														
120.000	1.1110		-.3980	-.6460	-.1010	-.0010			-.2680		-.5600	-.5330	-.2650	.0000	-.0060
135.000	1.1110														
142.000	1.1110									-.9610					
150.000	1.1110		-.2980	-.4770	-.0380	.2210			-.1360		-.7180	-.5730	-.3440	-.0120	-.0590
157.000	1.1110							.0480							
162.000	1.1110								-.3130						
165.000	1.1110										-.6620	-.5420	-.3120	-.0510	-.0780
169.000	1.1110								-.1840						
172.000	1.1110						.5290								
180.000	1.1110	.5080	-.2240	-.1690	.(50	.5140			.1520		-.9960	-.5090	-.4030	-.2760	-.1560

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0670							-.0690		-.1500
40.000	.0670	.0780		.0270	-.0090	.0480	-.0660			-.1820
70.000		-.2550	-.2820	-.3270	-.3090	-.5820	-.6880	-.4390		
90.000		-.1900	-.1840	-.2630	-.4110	-.5720	-.6540	-.6630		
105.000				-.2250	-.4950	-.5750	-.6530	-.6060		
110.000									-.2510	
120.000		-.1200	-.0210	-.1000	-.6160	-.6720	-.6260	-.6580	-.2470	
135.000				.3710	-.0110	-.6860	-.6250	-.5730		
150.000		-.1530	-.0350	.0160	-.2400	-.6300	-.7160	-.4720		
165.000		-.1570		.0680	-.0030	-.5640	-.5910	-.2590		
180.000		-.1730	-.0490	-.0250						

AMES 11-7X7 OA12 OBA ORBITER FUSELAGE (RBPB19) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 10.000 RUDDER = .000
ELEVON = 10.000 RUDFLR = .000

MACH (1) = .599 BETA (1) = -10.110

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9720	.7160	.4000	-.2970	.0310	.0580			.0520		.0320	.0370	.0520	.0730	.1060
25.000	.9720		.1990	-.2580	.0340	.0710			.0680		.0380				
40.000	.9720		.3980	.1070	.1460	.1050			.0960		.0570	.0620	.1070	.1270	.1720
55.000	.9720		.4490	.0930	.2240	.1990			.1640		.0770				
70.000	.9720		.4030	.0760	.1650	.1890			.1380		.0690	-.3040	-.1070	-.0560	-.1460
90.000	.9720	.8190	.2530	-.1070	.1780	.1720			.1270		-.0580	-.4590	-.1730	-.1370	-.1950
105.000	.9720														
110.000	.9720														
125.000	.9720		-.0480	-.1420	.0990	.1750			.2330		-.4150	-.4570	-.2680	-.2470	-.2760
135.000	.9720														
142.000	.9720									-.4500					
150.000	.9720		-.2220	-.2020	.0110	.3030			-.1540		-.8700	-.2840	-.1870	-.1600	-.1620
157.000	.9720							.2590							
162.000	.9720								-.3300						
165.000	.9720										-.4740	-.2350	-.1530	-.1470	-.1390
169.000	.9720								-.5750						
172.000	.9720						.4350								
180.000	.9720	.1040	-.5050	-.2980	-.0700	.3230			-.1870		-.7090	-.2910	-.4310	-.3600	-.2370

X/LB	.8075	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1220							-.0230		-.1290
40.000	.1950	.1640		.0720	.0170	.0370	-.1090			-.1220
70.000		-.3620	-.2650	-.1490	.0050	-.1200	-.1080	-.0930		
90.000		-.3080	-.1700	-.0250	.0050	-.1340	-.1070	-.1050		
105.000				.1320	-.0030	-.1320	-.1250	-.1340		
110.000									-.2140	
125.000		-.3060	-.0600	.3760	-.0820	-.1660	-.1020	-.0860	-.1440	
135.000				-.0550	-.2680	-.3130	-.2030	-.2170		
150.000		-.1880	-.0660	-.1120	-.3580	-.1570	-.0970	-.1850		
165.000		-.1740		-.0450	-.0420	-.0550	-.0680	-.2330		
180.000		-.2370	-.1550	-.1470						

AMES 11-7D7 OA12 OBA ORBITER FUSELAGE (RBPB19)

MACH (1) = .997 BETA (2) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5125
PHI															
.000	.9910	.7930	.0000	-.2580	.0780	.1050			.0900		.0660	.0750	.0930	.1050	.1390
20.000	.9910		.1160	-.2980	.0790	.1010			.0940		.0540				
40.000	.9910		.1450	-.1680	.0780	.1040			.0770		-.0360	-.0420	.0270	.0770	.1360
55.000	.9910		.0830	-.2110	.0220	.0000			-.0240		-.0980				
70.000	.9910		-.0260	-.2640	-.0670	.0190			-.0260		-.1510	-.4380	-.2070	-.1620	-.2280
90.000	.9910	.5120	-.1810	-.3180	.0000	.0240			-.0350		-.1920	-.5380	-.2100	-.1680	-.2040
105.000	.9910														
110.000	.9910														
120.000	.9910		-.3100	-.2890	.0100	.0760			-.0130		-.4180	-.3730	-.1860	-.1490	-.1630
135.000	.9910														
142.000	.9910									-.5740					
150.000	.9910		-.3520	-.2760	.0180	.2730			-.3060		-.6690	-.2240	-.1250	-.0940	-.1110
157.000	.9910							.1380							
162.000	.9910								-.5110						
165.000	.9910										-.4880	-.1920	-.1070	-.0750	-.0820
169.000	.9910								-.5880						
172.000	.9910						.4850								
180.000	.9910	.2040	-.4590	-.1710	.0200	.4320			-.1130		-.5510	-.1620	-.1180	-.0790	-.0750

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1540							-.0130		-.1090
40.000	.1740	.1770		.1110	.0710	.0480	-.0310			-.1070
70.000		-.4990	-.4140	-.3700	-.2140	-.2920	-.2280	-.1520		
90.000		-.3680	-.3090	-.2740	-.2780	-.2730	-.2150	-.1620		
105.000				-.2420	-.2810	-.2930	-.2250	-.1950		
110.000									-.2420	
120.000		-.2250	-.0350	.0190	-.4480	-.3130	-.1970	-.1800	-.1960	
139.000				.2190	-.1810	-.3070	-.1980	-.1880		
150.000		-.1580	-.0340	.1480	-.1650	-.2870	-.2300	-.2270		
165.000		-.1240		.0520	.0430	-.2450	-.2280	-.2050		
180.000		-.1080	-.0340	-.0270						

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBPB19)

MACH (1) = .599 BETA (3) = 10.270

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1906	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9540	.7270	.0000	-.2980	.0250	.0580			.0550		.0290	.0400	.0530	.0700	.1070
20.000	.9540		-.0810	-.3170	.0010	.0310			.0280		-.0100				
40.000	.9540		-.2030	-.4050	-.1090	-.0990			-.1500		-.3460	-.3530	-.2390	-.0990	.0200
55.000	.9540		-.3630	-.5490	-.2070	-.2140			-.2030		-.2520				
70.000	.9540		-.5020	-.6050	-.2530	-.1100			-.1550		-.2540	-.5070	-.2580	-.2280	-.2740
90.000	.9540	.1080	-.6530	-.6540	-.1330	-.0970			-.1590		-.2770	-.5540	-.2030	-.1550	-.2020
105.000	.9540														
110.000	.9540														
120.000	.9540		-.6570	-.5920	-.1220	-.0790			-.2820		-.4180	-.3170	-.1290	-.0950	-.1280
135.000	.9540														
142.000	.9540									-.9860					
150.000	.9540		-.5530	-.4620	-.1160	.0630			-.5310		-.5210	-.2140	-.1180	-.0980	-.1150
157.000	.9540							-.2180							
162.000	.9540								-.8890						
165.000	.9540										-.5250	-.2050	-.1240	-.1110	-.1460
169.000	.9540								-.7210						
172.000	.9540						.2900								
180.000	.9540	.1180	-.5000	-.2890	-.0620	.2990			-.2170		-.6880	-.2810	-.4110	-.3870	-.2350

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1210							-.0220		-.1310
40.000	.0780	.1100		.1030	.0750	.1040	.0320			-.1250
70.000		-.5150	-.5230	-.5200	-.3880	-.4230	-.3200	-.2270		
90.000		-.4170	-.4330	-.4940	-.4580	-.4170	-.3210	-.2380		
105.000				-.4760	-.5250	-.4320	-.3430	-.2710		
110.000									-.3130	
120.000		-.2610	-.1540	-.3780	-.8990	-.5170	-.3510	-.2840	-.2850	
135.000				.3210	-.2390	-.5250	-.3580	-.2780		
150.000		-.2040	-.1020	.0280	-.3780	-.6720	-.5420	-.4510		
165.000		-.1970		-.0160	-.1120	-.6530	-.4720	-.2490		
180.000		-.2580	-.1670	-.1500						

AMES 11-7ft OA12 OBA ORBITER FUSELAGE (RBPB19)

MACH (2) = .804 BETA (1) = -10.210

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	1.0970	.8770	.0000	-.4440	.0620	.1550			.1070		.0330	.0140	.0290	.0770	.1480
20.000	1.0970		.3380	-.2780	.0690	.1130			.1010		.0390				
40.000	1.0970		.5070	-.0130	.1820	.1550			.1360		.0470	.0070	.0680	.1460	.2110
55.000	1.0970		.5430	.0840	.2700	.2650			.2320		.1220				
70.000	1.0970		.4930	.0760	.2540	.2640			.2260		.0680	-.5210	-.2020	-.0250	-.0480
90.000	1.0970	.9370	.3380	-.0280	.2240	.2640			.2330		.0130	-.6830	-.2700	-.0990	-.1010
105.000	1.0970														
110.000	1.0970														
125.000	1.0970		.0670	-.1500	.1500	.2960			.3910		-.3160	-.8630	-.2910	-.1980	-.1900
135.000	1.0970														
142.000	1.0970									-.4090					
150.000	1.0970		-.1430	-.3890	.0700	.4680			.1370		-.7770	-.7570	-.2820	-.0820	-.0830
157.000	1.0970							.4860							
162.000	1.0970								.0130						
165.000	1.0970										-.5510	-.5990	-.1620	-.0650	-.0610
169.000	1.0970								-.2700						
172.000	1.0970						.6370								
180.000	1.0970	.2980	-.4500	-.5510	.0010	.4890			.0740		-1.0080	-.6090	-.4490	-.1740	-.1330

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1750							-.0920		-.1740
40.000	.2510	.2230		.1010	.0210	.0610	-.2190			-.1760
70.000		-.3400	-.3980	-.0990	.0560	-.1830	-.4230	-.3590		
90.000		-.3150	-.5250	.0260	-.0070	-.1910	-.3610	-.3970		
105.000				.0520	.0440	-.2250	-.3600	-.3550		
115.000									-.2480	
120.000		-.3900	-.2310	.4360	-.0470	-.3230	-.2200	-.1960	-.1740	
139.000				.1020	-.1640	-.6350	-.2070	-.2020		
150.000		-.2430	-.0580	-.0520	-.3260	-.1670	-.1970	-.1970		
165.000		-.2220		-.0010	-.0420	-.1240	-.0760	-.2640		
180.000		-.2220	-.0690	-.0420						

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBPB19)

MACH (2) = .898 BETA (2) = .0%

SECTION : 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.1550	.9350	.0000	-.3790	.1200	.1410			.1120		.0630	.0410	.0640	.1130	.1620
20.000	1.1550		.2360	-.3500	.1170	.1410			.1170		.0550				
40.000	1.1550		.2500	-.2800	.1140	.1530			.1120		-.0210	-.0740	-.0290	.0860	.1790
55.000	1.1550		.1960	-.3360	.0550	.0750			.0410		-.0660				
75.000	1.1550		.0800	-.4130	-.0140	.1000			.0520		-.1280	-.6550	-.3560	-.1080	-.1330
90.000	1.1550	.6620	-.0810	-.4980	.0600	.1270			.0670		-.2070	-.8080	-.2270	-.0980	-.1030
105.000	1.1550														
120.000	1.1550														
120.000	1.1550		-.2510	-.5020	.0850	.2160			.1220		-.4910	-.9350	-.3020	-.0460	-.0610
135.000	1.1550														
142.000	1.1550									-.8420					
150.000	1.1550		-.3240	-.5040	.1030	.4320			.0490		-.8840	-.5240	-.1600	.0070	-.0330
157.000	1.1550							.3830							
162.000	1.1550								-.1180						
165.000	1.1550										-.9350	-.4620	-.1060	.0290	-.0120
169.000	1.1550								-.2170						
172.000	1.1550						.6660								
180.000	1.1550	.3270	-.4610	-.5050	.1020	.5790			.1210		-.7630	-.5500	-.1100	.0690	-.0210

X/LB	.5873	.6626	.7390	.7869	.8283	.8849	.9262	.9639	1.0015	1.0392
PHI										
.000	.2050							-.1200		-.1560
40.000	.2270	.2340		.1360	.0720	.0900	-.1180			-.1590
75.000		-.4630	-.6760	-.5200	-.1580	-.3770	-.5210	-.6990		
90.000		-.3360	-.5060	-.3710	-.2510	-.3570	-.5340	-.5020		
105.000				-.3010	-.2850	-.3840	-.5440	-.5030		
110.000									-.2810	
120.000		-.2500	-.0870	.0480	-.3820	-.4760	-.4630	-.4160	-.2630	
135.000				.2510	-.1200	-.4980	-.3620	-.3290		
150.000		-.1810	-.0490	.1580	-.1090	-.4550	-.3330	-.3320		
165.000		-.1600		.1000	.0300	-.3970	-.3050	-.2330		
180.000		-.1420	-.0550	.0160						

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBPB19)

MACH (2) = .897 BETA (3) = 10.390

SECTION (1):ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0335	.0602	.1355	.1906	.1561	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0870	.8770	.0000	-.4400	.0690	.1030			.0850		.0350	.0190	.0390	.0720	.1480
20.000	1.0870		.0810	-.4590	.0370	.0850			.0710		.0050				
40.000	1.0870		-.0270	-.5760	-.0760	-.0260			-.0840		-.3110	-.3190	-.2920	-.1010	.0680
55.000	1.0870		-.1100	-.7090	-.2080	-.1020			-.1130		-.2380				
70.000	1.0870		-.3070	-.7180	-.2650	.0010			-.0695		-.2800	-.7150	-.3520	-.1860	-.1670
90.000	1.0870	.3330	-.4360	-.6150	-.2600	.0330			-.0650		-.3050	-.8540	-.2180	-.0990	-.1060
105.000	1.0870														
110.000	1.0870														
120.000	1.0870		-.5180	-.6380	-.1300	.0810			-.1360		-.4850	-.6080	-.2760	-.0330	-.0470
135.000	1.0870														
142.000	1.0870									-.7560					
150.000	1.0870		-.4680	-.6330	-.0550	.2530			-.1410		-.7280	-.6080	-.3480	-.0110	-.0530
157.000	1.0870							.0680							
162.000	1.0870								-.3540						
165.000	1.0870										-.5680	-.5700	-.3350	-.0290	-.0530
169.000	1.0870								-.2610						
172.000	1.0870						.4910								
180.000	1.0870	.2970	-.4680	-.4820	-.0110	.4650			.0550		-1.0450	-.5400	-.4760	-.2580	-.1450

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1700							-.0790		-.1520
40.000	.1220	.1620		.1350	.0910	.1120	-.0080			-.1920
70.000		-.3900	-.5550	-.4370	-.3630	-.5380	-.6610	-.8100		
90.000		-.3370	-.4290	-.4190	-.5330	-.5390	-.6040	-.6350		
105.000				-.3590	-.5550	-.5470	-.5960	-.6250		
110.000									-.3000	
120.000		-.2230	-.1530	-.2030	-.6170	-.7030	-.5760	-.6170	-.3500	
135.000				.3190	-.0400	-.6290	-.5620	-.5200		
150.000		-.1870	-.0870	.0490	-.2470	-.5960	-.6290	-.4380		
165.000		-.1760		.0370	-.0450	-.5510	-.5560	-.2630		
180.000		-.2250	-.1010	-.0500						

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBPB20) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 15.000 RUDDFR = .000
ELEVON = 10.000 RUDFLR = .000

MACH (1) = .598 BETA (1) = -10.080

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5125
PHI															
.000	.8710	.8450	.0000	-.1200	.1360	.1450			.1270		.1080	.1080	.1310	.1480	.1980
20.000	.8710		.4160	-.0010	.1460	.1700			.1590		.1340				
40.000	.8710		.5480	.1750	.2720	.2400			.2250		.1610	.1410	.1910	.2240	.2700
55.000	.8710		.5460	.1800	.2490	.1890			.1500		.0760				
70.000	.8710		.4240	.0930	.1230	.1680			.1260		-.0060	-.3410	-.1760	-.1360	-.2520
90.000	.8710	.7510	.1830	-.0720	.1120	.1260			.0950		-.1080	-.5580	-.2850	-.2520	-.2770
105.000	.8710														
110.000	.8710														
125.000	.8710		-.1820	-.2300	-.0150	.0920			.2370		-.5750	-.5810	-.4020	-.3780	-.3490
135.000	.8710														
142.000	.8710									-.5330					
150.000	.8710		-.4230	-.3610	-.0880	.2400			-.2510		-1.0260	-.3250	-.2220	-.2190	-.1940
157.000	.8710							.1890							
162.000	.8710								-.4310						
165.000	.8710										-.5410	-.2780	-.1780	-.2240	-.2120
169.000	.8710								-.7020						
172.000	.8710						.3770								
180.000	.8710	-.1270	-.7190	-.2440	-.1300	.2820			-.2940		-.7120	-.2910	-.5450	-.2520	-.2190

X/LB	.5673	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1990							-.0050		-.1280
40.000	.2910	.2720		.1450	.0820	.0670	-.0810			-.1080
70.000		-.6620	-.5120	-.3810	-.1780	-.2770	-.2360	-.1860		
90.000		-.3790	-.2440	-.1170	-.0860	-.1860	-.1790	-.1710		
105				.0960	-.0720	-.1960	-.1820	-.1890		
110.000									-.2600	
120.000		-.3870	-.1050	.3540	-.0870	-.2080	-.1360	-.1150	-.1690	
135.000				-.1420	-.3550	-.4160	-.2730	-.2700		
150.000		-.2420	-.1100	-.1620	-.4220	-.2060	-.1320	-.2170		
165.000		-.2390		-.0970	-.0930	-.1090	-.0980	-.2600		
180.000		-.2140	-.1420	-.1510						

AMES 11-7D7 OA12 OEA ORBITER FUSELAGE (RBPB20)

MACH (1) = .599 BETA (2) = .080

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9190	.9370	.0000	-.0720	.1840	.1850			.1720		.1490	.1480	.1680	.1830	.2240
25.000	.9190		.3380	-.0180	.1860	.1810			.1710		.1370				
40.000	.9190		.2950	-.0230	.1420	.1440			.1060		-.0550	-.0880	.0130	.1070	.2000
55.000	.9190		.1690	-.1610	-.0040	-.0710			-.0860		-.1410				
70.000	.9190		-.0090	-.2650	-.1430	-.0100			-.0490		-.1780	-.3140	-.3120	-.2700	-.4100
90.000	.9190	.4550	-.2460	-.3750	-.0470	-.0060			-.0580		-.2410	-.6490	-.3290	-.2820	-.2990
100.000	.9190														
110.000	.9190														
120.000	.9190		-.4670	-.4010	-.0550	.0470			.0240		-.5570	-.4580	-.2690	-.2280	-.2260
135.000	.9190														
142.000	.9190									-.6310					
150.000	.9190		-.5470	-.4510	-.0430	.2440			-.3790		-.7760	-.2540	-.1580	-.1360	-.1850
157.000	.9190							.1070							
162.000	.9190								-.6020						
165.000	.9190										-.5110	-.2110	-.1020	-.0790	-.1580
169.000	.9190								-.7030						
172.000	.9190						.4280								
180.000	.9190	-.0780	-.6730	-.2300	-.0440	.3820			-.2170		-.5560	-.1620	-.1160	-.0850	-.0880

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2380							-.0040		-.1220
40.000	.2480	.2610		.1770	.1250	.1120	-.0130			-.0970
70.000		-.6780	-.5850	-.5350	-.3960	-.5260	-.4280	-.2990		
90.000		-.5180	-.4440	-.4600	-.4530	-.4330	-.3560	-.2690		
105.000				-.3610	-.3800	-.4280	-.3510	-.2940		
110.000									-.3230	
120.000		-.2750	-.0870	-.0680	-.5060	-.4120	-.2910	-.2430	-.2620	
135.000				.1960	-.2420	-.3650	-.2490	-.2340		
150.000		-.2350	-.1230	.1470	-.2660	-.3680	-.3160	-.3050		
165.000		-.1530		.0130	.0650	-.2950	-.2670	-.2460		
180.000		-.1280	-.0510	-.0550						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB2U)

MACH (1) = .599 BETA (3) = 10.290

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3290	.3953	.5120
PHI															
.000	.8600	.8390	.8000	-.1060	.1370	.1440			.1360		.1050	.1200	.1380	.1550	.1910
20.000	.8500		.1400	-.1420	.0790	.1010			.0920		.0530				
40.000	.8500		-.0600	-.3040	-.1000	-.1420			-.2300		-.4810	-.4930	-.3210	-.1230	-.1480
55.000	.8500		-.2650	-.5160	-.2860	-.3240			-.2880		-.3530				
70.000	.8600		-.4900	-.6130	-.3320	-.1510			-.1780		-.2930	-.5620	-.3570	-.3420	-.4540
90.000	.8500	.1740	-.6850	-.6890	-.1690	-.1020			-.1640		-.3030	-.6140	-.2780	-.2340	-.3170
105.000	.8500														
110.000	.8500														
125.000	.8600		-.7830	-.6180	-.1150	-.0570			-.2000		-.4840	-.3460	-.1610	-.1390	-.2040
135.000	.8500														
142.000	.8500									-.8160					
150.000	.8500		-.7030	-.5650	-.1240	.0850			-.5540		-.5590	-.1990	-.1070	-.0890	-.1270
157.000	.8600							-.1870							
162.000	.8500								-.9360						
165.000	.8600										-.5250	-.1860	-.1150	-.1120	-.1340
169.000	.8600								-.8140						
175.000	.8500						.2560								
180.000	.8600	-.0990	-.7030	-.3120	-.1220	.2610			-.3160		-.6680	-.2700	-.5450	-.2770	-.3150

X/LB	.6670	.6833	.7380	.7669	.8283	.8846	.9262	.9639	1.0015	1.0392
PHI										
.000	.2140							-.0020		-.1180
40.000	.1640	.1710		.1610	.1290	.1360	.0610			-.1060
70.000		-.5450	-.6120	-.6320	-.4960	-.5550	-.4460	-.3180		
90.000		-.5750	-.5630	-.6560	-.5830	-.5310	-.4240	-.3040		
105.000				-.6160	-.6190	-.5260	-.4260	-.3330		
110.000									-.3410	
125.000		-.3550	-.1930	-.4130	-.9610	-.6050	-.4270	-.3530	-.3340	
135.000				.2880	-.2680	-.5490	-.3780	-.3070		
150.000		-.2160	-.1030	.0790	-.3440	-.6170	-.5080	-.4040		
165.000		-.2130		-.0020	-.1120	-.6240	-.5040	-.2650		
180.000		-.2240	-.1530	-.1520						

AMES 11-757 OA12 OBA ORBITER FUSELAGE (RBPB20)

MACH (2) = .902 BETA (1) = -10.190

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0420	.9870	.0000	-.1460	.1660	.1930			.1720		.1360	.1060	.1210	.1600	.2330
20.000	1.0420		.5160	-.0130	.2000	.2200			.2050		.1490				
40.000	1.0420		.6400	.1820	.3050	.2910			.2740		.1790	.1280	.1690	.2310	.3110
55.000	1.0420		.6340	.1980	.3020	.2700			.2480		.1580				
75.000	1.0420		.5190	.1110	.1720	.2570			.2340		.0960	-.4910	-.2840	-.0920	-.1230
90.000	1.0420	.8940	.2980	-.0750	.1740	.2370			.2330		.0850	-.6870	-.4030	-.1880	-.1460
105.000	1.0420														
110.000	1.0420														
120.000	1.0420		-.0660	-.2740	.0540	.2380			.4230		-.4090	-.9130	-.5260	-.2910	-.2680
135.000	1.0420														
142.000	1.0420									-.4310					
150.000	1.0420		-.3040	-.5680	-.0140	.4260			.0810		-.9520	-.6420	-.4130	-.1280	-.1250
157.000	1.0420							.4420							
162.000	1.0420								-.0340						
165.000	1.0420										-.5930	-.5630	-.1840	-.1130	-.1260
169.000	1.0420								-.3320						
172.000	1.0420						.6000								
180.000	1.0420	.1640	-.6110	-.7100	-.0430	.4520			.0010		-.9390	-.6790	-.4350	-.1150	-.1120

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2570							-.0730		-.1540
40.000	.3520	.3400		.2000	.1190	.1180	-.1520			-.1750
70.000		-.6310	-.9100	-.4580	-.2390	-.5690	-.6120	-.6760		
90.000		-.3730	-.6370	.0290	-.1060	-.4020	-.5470	-.5230		
105.000				.1760	-.0510	-.3270	-.5410	-.5550		
110.000									-.2450	
120.000		-.4790	-.1560	.5300	-.0410	-.4240	-.5120	-.3820	-.1390	
135.000				.0060	-.2690	-.8310	-.3880	-.3190		
150.000		-.3050	-.0700	-.0590	-.3900	-.4170	-.2250	-.2630		
165.000		-.2900		-.0180	-.0710	-.3000	-.1760	-.2920		
180.000		-.2290	-.1020	-.0670						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB2U)

MACH (2) = .9[illegible] BETA (2) = .07U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0444	.0675	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
Y/I															
.000	1.1050	1.0310	.9000	-.1060	.2150	.2340			.2120		.1020	.1430	.1510	.1960	.2680
.050	1.1060		.4190	-.0720	.2120	.2320			.2180		.1540				
40.000	1.1160		.3930	-.0600	.1800	.2150			.1780		.0170	-.0320	.0080	.1360	.2510
55.000	1.1160		.2970	-.1960	.0510	.0400			.0370		-.0500				
70.000	1.1160		.1310	-.3240	-.0740	.1040			.0740		-.0920	-.6420	-.5290	-.1680	-.2980
90.000	1.1160	.6500	-.0810	-.5210	.0010	.1200			.0970		-.1900	-.8140	-.5210	-.1780	-.1620
105.000	1.1160														
117.000	1.1160														
125.000	1.1160		-.3500	-.5920	.0630	.2060			.2070		-.5430	-.7500	-.3650	-.0670	-.0810
135.000	1.1160														
140.000	1.1160									-.7720					
150.000	1.1160		-.4570	-.5900	.0930	.2110			.0220		-.9380	-.4840	-.2710	-.0250	-.0850
157.000	1.1160							.3560							
162.000	1.1160								-.1410						
165.000	1.1160										-.8840	-.4540	-.1350	.0370	-.0240
170.000	1.1160								-.2550						
175.000	1.1160						.5750								
180.000	1.1160	.1630	-.0720	-.2710	-.0370	.0140			.0630		-.7860	-.5450	-.1260	.0150	-.0130
X/LB	.6673	.8018	.7380	.7869	.9263	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	.3560							-.0890		-.1510					
40.000	.3090	.3360		.2410	.1720	.1650	-.0420			-.1740					
70.000		-.5740	-.8210	-.4410	-.4050	-.6110	-.7790	-.7120							
90.000		-.4380	-.5260	-.3990	-.5370	-.5970	-.6500	-.6220							
105.000				-.2520	-.4170	-.5540	-.6360	-.6290							
110.000									-.2710						
120.000		-.2740	-.1090	.1080	-.3420	-.6220	-.5680	-.5120	-.3350						
135.000				.2470	-.1430	-.6020	-.4880	-.4060							
150.000		-.2200	-.0810	.1410	-.1390	-.5330	-.4770	-.3960							
165.000		-.2040		.0620	.0120	-.4520	-.4040	-.2520							
180.000		-.1670	-.0740	-.0130											

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AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB2U)

MACH (2) = .9U2 BETA (3) = 15.38U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0642	.1355	.1506	.1561	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0720	.9610	.0000	-.1380	.1730	.1900			.1780		.1280	.1210	.1250	.1630	.2270
20.000	1.0720		.2540	-.1740	.1150	.1560			.1440		.0890				
40.000	1.0720		.0960	-.3410	-.0560	-.0420			-.1040		-.3870	-.3680	-.2880	-.1130	.1030
55.000	1.0720		-.0380	-.6460	-.2700	-.2030			-.1580		-.2580				
70.000	1.0720		-.2650	-.6870	-.3470	-.1200			-.0550		-.2420	-.7190	-.6730	-.3090	-.3470
90.000	1.0720	.3030	-.4480	-.6560	-.2400	.0410			-.0310		-.3090	-.8760	-.3520	-.1560	-.1970
105.000	1.0720														
110.000	1.0720														
120.000	1.0720		-.6200	-.6110	-.1690	.1050			-.0510		-.5040	-.7820	-.2690	-.0590	-.1010
135.000	1.0720									-.7980					
142.000	1.0720														
150.000	1.0720		-.6480	-.6800	-.0190	.2770			-.1370		-.7220	-.6060	-.3460	-.1030	-.0520
157.000	1.0720							.1090							
162.000	1.0720								-.3730						
165.000	1.0720										-.5700	-.6270	-.3320	-.1620	-.0420
169.000	1.0720								-.3140						
172.000	1.0720						.4740								
180.000	1.0720	.1430	-.6420	-.7630	-.0390	.4340			-.0110		-.9020	-.6130	-.4490	-.1160	-.1160

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2580							-.0650		-.1430
40.000	.1780	.2320		.2140	.1610	.1650	.0340			-.2050
70.000		-.5200	-.7480	-.5000	-.4210	-.6200	-.7580	-.8610		
90.000		-.4700	-.6540	-.5990	-.6320	-.5940	-.6720	-.6900		
105.000				-.4580	-.5970	-.6410	-.6770	-.6630		
110.000									-.3120	
120.000		-.3040	-.2570	-.2860	-.6060	-.8340	-.6780	-.6760	-.3580	
135.000				.3360	-.0570	-.6760	-.6060	-.5930		
150.000		-.2250	-.1090	.0990	-.1880	-.5860	-.5890	-.5020		
165.000		-.2080		.0490	-.0380	-.5450	-.5280	-.2810		
180.000		-.2300	-.1100	-.0640						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB21) (01 MAY 73)

REFERENCE DATA

SREF = 2.421U SQ.FT. XMRP = 28.53UU INCHES
LREF = 39.849U INCHES YMRP = .UUUU INCHES
BREF = 39.849U INCHES ZMRP = .UUUU INCHES
SCALE = .03UU SCALE

PARAMETRIC DATA

ALPHA = 2U.UUU RUDDER = .UUU
ELEVON = 1U.UUU RUDFLR = .UUU

MACH (1) = .6UU BETA (1) = -1U.UUU

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.UUUU	.UU75	.U188	.U339	.U6U2	.1355	.15U6	.1581	.1732	.1958	.2259	.2711	.32UU	.3953	.512U
PHI															
.UUU	.729U	.927U	.UUUU	.U91U	.245U	.245U			.231U		.2U9U	.2U3U	.224U	.243U	.28GU
2U.UUU	.729U		.621U	.219U	.295U	.288U			.279U		.244U				
4U.UUU	.729U		.697U	.344U	.379U	.349U			.329U		.229U	.181U	.256U	.311U	.387U
55.UUU	.729U		.5U8U	.254U	.248U	.1PUU			.1U1U		.U4UU				
7U.UUU	.729U		.413U	.U67U	.U36U	.113U			.U85U		-.U43U	-.396U	-.278U	-.236U	-.55PU
9U.UUU	.729U	.655U	.U94U	-.164U	.U12U	.U43U			.U31U		-.173U	-.695U	-.441U	-.391U	-.345U
1U5.UUU	.729U														
11U.UUU	.729U														
12U.UUU	.729U		-.385U	-.391U	-.155U	-.U21U			.218U		-.769U	-.741U	-.55UU	-.53UU	-.5U9U
133.UUU	.729U														
142.UUU	.729U									-.61PU					
15U.UUU	.729U		-.643U	-.522U	-.2U2U	.161U			-.347U		-.119U	-.386U	-.27 1	-.283U	-.2U1U
157.UUU	.729U							.U99U							
162.UUU	.729U								-.543U						
165.UUU	.729U										-.611U	-.315U	-.194U	-.3U1U	-.286U
169.UUU	.729U								-.841U						
172.UUU	.729U						.311U								
18U.UUU	.729U	-.356U	-.927U	-.355U	-.178U	.233U			-.385U		-.7U1U	-.3U4U	-.6U2U	-.17PU	-.1U4U

X/LB	.5873	.6626	.738U	.7869	.9283	.8848	.9262	.9639	1.UU15	1.U392
PHI										
.UUU	.297U							.U38U		-.113U
4U.UUU	.4U1U	.392U		.249U	.173U	.135U	-.U32U			-.U94U
7U.UUU		-.982U	-.821U	-.674U	-.468U	-.454U	-.385U	-.33UU		
9U.UUU		-.638U	-.564U	-.514U	-.419U	-.373U	-.3U5U	-.252U		
1U5.				-.U73U	-.292U	-.339U	-.291U	-.268U		
115.UUU									-.237U	
12U.UUU		-.438U	-.142U	.3U2U	-.167U	-.284U	-.172U	-.129U	-.176U	
135.UUU				-.179U	-.433U	-.487U	-.326U	-.314U		
15U.UUU		-.294U	-.148U	-.186U	-.476U	-.261U	-.176U	-.259U		
165.UUU		-.3U3U		-.142U	-.147U	-.184U	-.136U	-.29UU		
18U.UUU		-.248U	-.192U	-.2U9U						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB21)

MACH (1) = .601 BETA (2) = .07U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.8240	1.0070	.6880	.1360	.2990	.2850			.2680		.2420	.2460	.2550	.2770	.3170
20.000	.8240		.5280	.1690	.2900	.2740			.2620		.2260				
40.000	.8240		.4280	.1090	.1910	.1640			.1120		-.1060	-.1570	-.0110	.1320	.2620
55.000	.8240		.2320	-.1120	-.0660	-.2020			-.1820		-.2090				
70.000	.8240		-.0200	-.3110	-.2460	-.0660			-.0950		-.2220	-.5790	-.4260	-.3720	-.7360
90.000	.8240	.3570	-.3340	-.4590	-.1340	-.0750			-.1000		-.3070	-.7760	-.4670	-.3930	-.3820
105.000	.8240														
110.000	.8240														
120.000	.8240		-.6440	-.5460	-.1340	-.0490			.0470		-.7110	-.5670	-.3650	-.3070	-.2790
135.000	.8240														
142.000	.8240									-.6880					
150.000	.8240		-.7390	-.3880	-.1010	.2130			-.4370		-.8770	-.2840	-.2100	-.2430	-.3380
157.000	.8240							.0730							
162.000	.8240								-.6680						
165.000	.8240										-.5190	-.2280	-.1070	-.0830	-.1290
169.000	.8240								-.8080						
172.000	.8240						.3730								
180.000	.8240	-.2950	-.8610	-.3080	-.0850	.3390			-.3060		-.5440	-.1660	-.1150	-.0840	-.1090

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3320							.0240		-.1220
40.000	.3230	.3500		.2650	.2030	.1750	.0330			-.1330
70.000		-.9400	-.7960	-.6900	-.5110	-.4710	-.3890	-.3210		
90.000		-.8410	-.7980	-.8670	-.6670	-.4820	-.3660	-.3010		
105.000				-.6210	-.5640	-.4570	-.3810	-.3350		
110.000									-.3850	
120.000		-.3410	-.1790	-.2490	-.6630	-.4750	-.3310	-.2820	-.3110	
135.000				.2050	-.2720	-.3930	-.2610	-.2580		
150.000		-.3100	-.1470	.1490	-.3190	-.4170	-.3660	-.3680		
165.000		-.2110		-.0040	.0320	-.3100	-.2910	-.2810		
180.000		-.1670	-.0880	-.0950						

AMES 11-7D7 OA12 O2A ORBITER FUSELAGE (RBPB21)

MACH (1) = .598 BETA (3) = 10.370

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.7310	.8750	.6000	.0940	.2500	.2410			.2260		.2060	.2040	.2240	.2380	.2850
20.000	.7310		.3240	.0270	.1770	.1710			.1640		.1290				
40.000	.7310		.0640	-.2120	-.1080	-.2120			-.3320		-.6530	-.6980	-.4380	-.1600	.0830
55.000	.7310		-.1110	-.5040	-.4110	-.5230			-.4550		-.5190				
70.000	.7310		-.5200	-.6660	-.4890	-.2250			-.2460		-.3520	-.6760	-.5010	-.5080	-.7680
90.000	.7310	-.0390	-.7910	-.7560	-.2440	-.1560			-.1980		-.3740	-.7400	-.4020	-.3550	-.4550
105.000	.7310														
110.000	.7310														
120.000	.7310		-.9380	-.7200	-.1560	-.0510			-.1480		-.6000	-.4170	-.2330	-.2300	-.3160
135.000	.7310														
142.000	.7310									-.7290					
150.000	.7310		-.9140	-.3870	-.1490	.1070			-.5880		-.6270	-.2360	-.1140	-.1090	-.1670
157.000	.7310							-.1560							
162.000	.7310								-.9690						
165.000	.7310										-.5890	-.2260	-.0920	-.1040	-.1680
169.000	.7310								-.9480						
172.000	.7310						.2170								
180.000	.7310	-.2890	-.9210	-.3790	-.1820	.2310			-.4160		-.6740	-.2750	-.6080	-.1990	-.2180

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2370							.0380		-.1130
40.000	.1630	.2370		.2440	.1940	.1940	.1170			-.1140
70.000		-.8490	-.7750	-.8040	-.6250	-.5830	-.4440	-.3130		
90.000		-.9320	-.8930	-1.0690	-.7990	-.6210	-.4400	-.3090		
105.000				-.9510	-.8630	-.6040	-.4600	-.3750		
110.000									-.3930	
120.000		-.5830	-.2800	-.6590	-1.3210	-.7670	-.5300	-.4310	-.4130	
135.000				.2600	-.2810	-.5960	-.4130	-.3500		
150.000		-.2660	-.1320	.0590	-.3290	-.6130	-.4860	-.4180		
165.000		-.2600		-.0270	-.1200	-.6180	-.5060	-.3050		
180.000		-.2480	-.1830	-.2040						

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBPB21)

MACH (2) = .942 BETA (1) = -10.100

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9500	1.0620	.0000	.1180	.3120	.3070			.2880		.2600	.2380	.2550	.2760	.3390
20.000	.9500		.7120	.2490	.3450	.3490			.3330		.2890				
40.000	.9500		.7840	.3820	.4280	.4150			.3960		.2900	.2390	.2850	.3570	.4220
55.000	.9500		.7060	.3070	.3130	.2230			.2180		.1680				
70.000	.9500		.5340	.1390	.0970	.2240			.2210		.1180	-.3950	-.3020	-.2220	-.3710
90.000	.9500	.8120	.2410	-.1240	.0830	.1650			.1990		-.0010	-.6410	-.5370	-.4150	-.1930
105.000	.9500														
110.000	.9500														
120.000	.9500		-.2150	-.4180	-.0880	.1330			.4360		-.6000	-.9910	-.8200	-.3290	-.3270
135.000	.9500														
142.000	.9500									-.4640					
150.000	.9500		-.4730	-.7230	-.1250	.3660			.0050		-1.0730	-.7650	-.4610	-.2670	-.1820
157.000	.9500							.3780							
162.000	.9500								-.0890						
165.000	.9500										-.6130	-.5790	-.2200	-.1780	-.2190
169.000	.9500								-.3930						
172.000	.9500						.5310								
180.000	.9500	-.0430	-.7810	-.7170	-.0910	.3960			-.0790		-.9180	-.7260	-.3190	-.0840	-.0950

X/LB	.5873	.6626	.7380	.7819	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3810							-.0130		-.1450
40.000	.4540	.4610		.3130	.2290	.2000	-.0530			-.2040
70.000		-.8120	-1.0480	-.6850	-.8560	-.8450	-.6580	-.6030		
90.000		-.5010	-.8530	-.4360	-.7210	-.6280	-.6110	-.4670		
105.000				.0430	-.4990	-.5420	-.6030	-.4570		
110.000									-.4530	
120.000		-.4910	-.1810	.4720	-.1590	-.5150	-.4910	-.3560	-.2870	
135.000				-.0750	-.3820	-.9640	-.6450	-.3180		
150.000		-.3060	-.1070	-.0930	-.4100	-.6310	-.3830	-.3040		
165.000		-.2870		-.0570	-.1290	-.5395	-.3510	-.3690		
180.000		-.2890	-.1650	-.1050						

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBPB21)

MACH (2) = .894 BETA (2) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0090	1.1110	.0000	.1370	.3400	.3350			.3140		.2770	.2610	.2730	.3030	.3650
25.000	1.0090		.6110	.1740	.3400	.3240			.3160		.2660				
40.000	1.0090		.5260	.1210	.2430	.2430			.1920		.0070	-.0280	.0550	.1740	.3200
55.000	1.0090		.3650	-.0870	-.0120	-.0870			-.0450		-.0620				
75.000	1.0090		.1410	-.2900	-.2090	.0440			.0530		-.0700	-.6300	-.5170	-.2360	-.6570
90.000	1.0090	.5530	-.1470	-.5810	-.0680	.0620			.0780		-.1750	-.8250	-.7390	-.2270	-.2410
105.000	1.0090														
110.000	1.0090														
125.000	1.0090		-.4930	-.6700	-.0480	.1590			.2440		-.6620	-.8740	-.4320	-.1490	-.1150
135.000	1.0090														
142.000	1.0090									-.7480					
150.000	1.0090		-.6340	-.5680	-.0410	.3630			-.0280		-1.0220	-.5900	-.3920	-.1370	-.2170
157.000	1.0090							.3190							
162.000	1.0090								-.1650						
165.000	1.0090										-.8490	-.4590	-.1880	.0320	-.0650
169.000	1.0090								-.2950						
172.000	1.0090						.4480								
180.000	1.0090	.0020	-.5980	-.4790	-.1010	.3840			-.0120		-.7680	-.5120	-.1410	.0150	-.0370

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3960							-.0170		-.1640
40.000	.3910	.4270		.3360	.2640	.2350	.0370			-.2440
75.000		-.7630	-.9130	-.5820	-.5620	-.6230	-.7580	-.5910		
90.000		-.6770	-.8790	-.8070	-.9480	-.7210	-.5820	-.5640		
105.000				-.3920	-.6330	-.8020	-.5140	-.5940		
110.000									-.4320	
120.000		-.2930	-.1420	.0380	-.3860	-.8260	-.5680	-.4340	-.3440	
135.000				.2420	-.1960	-.6920	-.5800	-.3680		
150.000		-.2710	-.0980	.1400	-.1650	-.6320	-.5850	-.4770		
165.000		-.2580		.0250	.0070	-.5490	-.5130	-.3420		
180.000		-.2120	-.0910	-.0580						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7D7 OA12 OBA ORBITER FUSELAGE (RBPB21)

MACH (2) = .901 BETA (3) = 10.420

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1906	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9610	1.0390	.0440	.1170	.3140	.3020			.2920		.2560	.2400	.2460	.2700	.3360
25.000	.9610		.4490	.5770	.2330	.2440			.2400		.1940				
40.000	.9610		.2470	-.1390	-.0310	-.0900			-.1760		-.4790	-.5040	-.2910	-.0850	.1520
55.000	.9610		.0510	-.4780	-.3570	-.3860			-.2690		-.3680				
70.000	.9610		-.2350	-.6790	-.5350	-.0770			-.0830		-.2190	-.7130	-.7160	-.3240	-.6170
90.000	.9610	.2510	-.4680	-.6390	-.3010	.0240			-.0220		-.2990	-.8990	-.6860	-.1920	-.3560
105.000	.9610														
110.000	.9610								-.0690		-.5520	-.9910	-.2960	-.1350	-.1930
120.000	.9610		-.6780	-.5580	-.3000	.1130									
135.000	.9610									-.8750					
142.000	.9610								-.1400		-.6890	-.6260	-.2730	-.1230	-.0630
150.000	.9610		-.7720	-.6070	-.1820	.2690		.1330							
157.000	.9610								-.3960						
162.000	.9610										-.6250	-.6520	-.2460	.0060	-.0410
165.000	.9610								-.3620						
169.000	.9610						.4300								
172.000	.9610								-.0680		-.9020	-.6750	-.3340	-.0950	-.0960
180.000	.9610	.0080	-.7930	-.6610	-.1010	.3830									
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	.3590							-.0200		-.1480					
40.000	.2400	.3080		.3070	.2540	.2440	.1150			-.2250					
75.000		-.6660	-.7910	-.5580	-.5310	-.4150	-.6470	-.6130							
90.000		-.7220	-.8200	-.8700	-.9860	-.4640	-.4200	-.4570							
105.000				-.6870	-.7650	-.6630	-.4390	-.5160							
110.000									-.4440						
120.000		-.4120	-.3500	-.4190	-.6430	-.8990	-.6700	-.3850	-.4730						
135.000				.3950	-.0050	-.6760	-.6390	-.4910							
150.000		-.2630	-.1420	.2180	-.1640	-.5780	-.5880	-.5610							
165.000		-.2530		.0670	-.0230	-.5030	-.5170	-.3760							
180.000		-.2890	-.1370	-.0960											

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBFB22) (01 MAY 73)

REFERENCE DATA

SREF = 2.421U SQ.FT. XMRP = 28.53UU INCHES
LREF = 39.849U INCHES YMRP = .UUUU INCHES
BREF = 39.849U INCHES ZMRP = .UUUU INCHES
SCALE = .03UU SCALE

PARAMETRIC DATA

ALPHA = .UUU RUDDER = .UUU
ELEVON = -10.UUU RUDFLR = .UUU

MACH (1) = .598 BETA (1) = -7.97U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.UUUU	.UU75	.U188	.0339	.U602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.UUU	.9515	.3875	.UUUU	-.7350	-.1420	-.U670			-.U700		-.U795	-.U740	-.U560	-.U380	-.U330
20.UUU	.9515		-.3620	-.6600	-.2075	-.1UUU			-.U990		-.1100				
40.UUU	.9515		-.U700	-.4350	-.1750	-.239U			-.2510		-.2700	-.2130	-.1390	-.U870	-.U470
55.UUU	.9515		.1130	-.2080	.U350	.U580			.U470		-.U210				
75.UUU	.9515		.2UUU	-.U870	.1180	.1240			.U800		-.U310	-.2890	-.U280	.U430	.U220
90.UUU	.9515	.8150	.2460	-.U200	.1580	.1490			.U850		-.U570	-.3410	-.U390	.U230	.U160
105.UUU	.9515														
110.UUU	.9515														
120.UUU	.9515		.2600	.U970	.2370	.2490			.1340		-.1720	-.2410	-.U650	-.U170	-.U050
135.UUU	.9515									-.2830					
142.UUU	.9515														
150.UUU	.9515		.1850	.1100	.2360	.4400			.U320		-.5110	-.1720	-.U820	-.U430	-.U190
157.UUU	.9515							.4040							
162.UUU	.9515								-.U810						
165.UUU	.9515										-.3490	-.1420	-.U650	-.U230	-.U010
169.UUU	.9515								-.2220						
172.UUU	.9515						.5940								
180.UUU	.9515	.5390	-.U400	.U320	.1340	.4640			.U880		-.5650	-.2230	-.2090	-.2020	-.1830

X/LB	.5573	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.UUU	-.U540							-.1640		-.1600
40.UUU	-.U700	-.1590		-.2430	-.2940	-.3650	-.1810			-.1560
75.UUU		-.U440	-.UU60	.U690	.2000	.1600	.1500	.U360		
90.UUU		-.U100	.U570	.1400	.1740	.1110	.U740	-.UU80		
105.				.2100	.1300	.U730	.U390	-.U330		
110.UUU									-.1390	
120.UUU		.UU10	.1640	.3900	.UU90	.UU30	.U250	-.U100	-.1UUU	
135.UUU				.3000	.U280	-.U860	-.U320	-.U780		
150.UUU		.UU90	.1300	.1330	-.U760	-.U260	-.UU30	-.U920		
165.UUU		.U290		.1800	.1570	.U640	.U130	-.1470		
180.UUU		-.1330	-.U390	-.U630						

AMES 11-7D7 OA12 OBA ORBITER FUSELAGE (R3PB22)

MACH (1) = .995 BETA (2) = -3.940

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.0480	.3940	.0000	-.0990	-.1080	-.0400			-.0520		-.0630	-.0530	-.0350	-.0250	-.0180
25.000	1.0480		-.3670	-.0220	-.1450	-.0630			-.0670		-.0830				
40.000	1.0480		-.1480	-.4580	-.1250	-.1340			.1480		-.1740	-.1370	-.0690	-.0390	-.0170
55.000	1.0480		-.0490	-.3560	-.0130	.0280			.0420		-.0560				
70.000	1.0480		.0290	-.2140	.0220	.0590			.0120		-.0870	-.0390	-.0200	.0120	-.0040
90.000	1.0480	.0930	.0580	-.1640	.0810	.0720			.0040		-.1190	-.0890	-.0630	-.0350	.0020
105.000	1.0480														
115.000	1.0480														
125.000	1.0480		.1150	-.0140	.1590	.1590			-.0010		-.2140	-.2550	-.0760	-.0210	-.0010
135.000	1.0480														
142.000	1.0480									-.3690					
150.000	1.0480		.1130	.0800	.2010	.3970			-.0620		-.4860	-.1680	-.0780	-.0360	-.0110
157.000	1.0480							.3270							
162.000	1.0480								-.1720						
165.000	1.0480										-.3920	-.1490	-.0740	-.0280	-.0060
169.000	1.0480								-.2390						
172.000	1.0480						.6140								
180.000	1.0480	.5730	-.0250	.0540	.1760	.5210			.1290		-.5250	-.1640	-.1520	-.0690	-.0400

X/LB	.5873	.6626	.7380	.7889	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
.000	-.0350							-.1570		-.1590
40.000	-.0350	-.1190		-.2270	-.2870	-.3740	-.2010			-.1520
70.000		-.0780	-.0580	.0120	.1430	.1390	.1190	.0180		
90.000		-.0380	.0180	.0660	.1550	.0670	.0470	-.0230		
105.000				.1120	.0430	.0230	.0080	-.0530		
115.000									-.1450	
125.000		.0000	.1520	.2640	-.1090	-.0510	-.0690	-.0340	-.1110	
135.000				.3890	.0350	-.0990	-.0400	-.0810		
150.000		.0200	.1490	.2030	-.0120	-.0790	-.0540	-.1210		
165.000		.0270		.2090	.1670	-.0130	-.0640	-.1420		
180.000		-.0180	.0640	.1040						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A (REP822)

AMES 11-707 OA12 02A ORBITER FUSELAGE

MACH (1) = .597 BETA (3) = .080

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1906	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI									-.0480		-.0620	-.0500	-.0290	-.0200	-.0170
.000	1.0290	.4900	.0000	-.7100	-.1080	-.0370			-.0490		-.0730				
20.000	1.0290		-.4220	-.6310	-.1250	-.0500			-.0900		-.1340	-.1070	-.0420	-.0220	-.0020
40.000	1.0290		-.2640	-.5060	-.1140	-.0790			-.0410		-.0960				
53.000	1.0290		-.1850	-.4130	-.0520	-.0110			-.0490		-.1410	-.3780	-.0860	-.0120	-.0230
75.000	1.0290		-.1520	-.3450	-.0490	.0000			-.0710		-.1730	-.4130	-.0890	-.0190	-.0110
90.000	1.0290	.5540	-.1350	-.3070	-.0100	-.0050									
105.000	1.0290								-.1450		-.2460	-.2700	-.0980	-.0270	-.0010
110.000	1.0290														
120.000	1.0290		-.0400	-.1350	.0620	.0620				-.4480					
135.000	1.0290														
142.000	1.0290								-.1620		-.4550	-.1700	-.0790	-.0360	-.0050
150.000	1.0290		.0310	.0050	.1560	.3280		.2070							
157.000	1.0290								-.2870						
162.000	1.0290										-.4210	-.1520	-.0790	-.0310	-.0130
165.000	1.0290								-.2780						
169.000	1.0290						.6010								
172.000	1.0290								.1440		-.5010	-.1390	-.1060	-.0430	-.0180
180.000	1.0290	.5870	-.0020	.0680	.1920	.5410									

X/LB	.5873	.6625	.7380	.7859	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI								-.1590		-.1540
.000	-.0340									-.1510
20.000	-.0170	-.0690		-.2090	-.2720	-.3740	-.2300			
40.000		-.0970	-.0960	-.0420	.0810	.0970	.0880	.0030		
75.000		-.0560	-.0180	-.0100	.0310	.0250	.0140	-.0370		
90.000				-.0010	-.0370	-.0190	-.0210	-.0710		
105.000									-.1480	
110.000									-.1310	
120.000		-.0050	.1260	.0960	-.2570	-.1010	-.0390	-.0530		
135.000				.4370	-.0080	-.1620	-.0810	-.1030		
150.000		.0200	.1510	.2650	.0340	-.1520	-.1200	-.1570		
165.000		.0240		.2310	.1580	-.1110	-.1450	-.1460		
180.000		.0260	.1130	.1490						

AMES 11-707 OA12 OPA ORBITER FUSELAGE (RBPB22)

MACH (1) = .598 BETA (4) = 4.200

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3913	.5120
PHI															
.000	1.0460	.4260	.0000	-.7200	-.1090	-.0500			-.0530		-.0680	-.0590	-.0320	-.0320	-.0230
20.000	1.0460		-.4640	-.6620	-.1140	-.0470			-.0480		-.0700				
40.000	1.0460		-.3860	-.5540	-.1160	-.0560			-.0550		-.1240	-.1060	-.0410	-.0260	.0030
55.000	1.0460		-.3470	-.5150	-.0980	-.0450			-.0770		-.1310				
70.000	1.0460		-.3400	-.4690	-.1120	-.0540			-.1010		-.1750	-.4030	-.1040	-.0260	-.0270
90.000	1.0460	.3950	-.3310	-.4390	-.0960	-.0720			-.1400		-.2190	-.4330	-.0950	-.0320	-.0130
105.000	1.0460														
110.000	1.0460														
120.000	1.0460		-.2020	-.2610	-.0410	-.0490			-.2970		-.2840	-.2830	-.0970	-.0390	-.0690
135.000	1.0460														
142.000	1.0460									-.5860					
150.000	1.0460		-.0620	-.0750	.0760	.2230			-.2770		-.4410	-.1870	-.0940	-.0470	-.0150
157.000	1.0460							.0510							
162.000	1.0450								-.4490						
165.000	1.0460										-.4240	-.1530	-.0880	-.0450	-.0230
169.000	1.0460								-.3340						
172.000	1.0460						.5420								
180.000	1.0450	.5820	-.0150	.0590	.1750	.5170			.1120		-.5260	-.1640	-.1340	-.0650	-.0350

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0440							-.1630		-.1570
40.000	-.0160	-.0870		-.1960	-.2470	-.3790	-.2660			-.1540
70.000		-.1150	-.1280	-.0900	.0290	.0600	.0530	-.0180		
90.000		-.0710	-.0540	-.0750	-.0300	-.0090	-.0080	-.0590		
105.000				-.0870	-.1210	-.0620	-.0480	-.0900		
110.000									-.1750	
120.000		-.0260	.0910	-.0770	-.4060	-.1530	-.0730	-.0820	-.1430	
135.000				.4310	-.0960	-.2650	-.1470	-.1460		
150.000		.0070	.1280	.3240	.0640	-.2370	-.1810	-.1860		
165.000		-.0070		.2230	.1350	-.2500	-.2020	-.1510		
180.000		-.0070	.0800	.1180						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (.3PB22)

MACH (1) = .967 BETA (5) = 8.3UU

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.UUU7	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PHI															
.UUU	.9430	.3960	.0000	-.7390	-.1380	-.0690			-.0700		-.0820	-.0660	-.0490	-.0440	-.0340
20.UUU	.9430		-.5410	-.6860	-.1320	-.0560			-.0550		-.0850				
40.UUU	.9430		-.5160	-.6160	-.1410	-.0570			-.0690		-.1520	-.1220	-.0670	-.0470	-.0170
55.UUU	.9430		-.5260	-.6360	-.1400	-.0800			-.1090		-.1530				
70.UUU	.9430		-.5300	-.6190	-.1610	-.0930			-.1370		-.2020	-.3950	-.1050	-.0310	-.0330
90.UUU	.9430	.2110	-.5340	-.5740	-.1540	-.1350			-.1920		-.2460	-.4170	-.0950	-.0280	-.0170
105.UUU	.9430														
110.UUU	.9430														
120.UUU	.9430		-.3730	-.3990	-.1450	-.1580			-.4340		-.3010	-.2680	-.1140	-.0490	-.0210
135.UUU	.9430														
142.UUU	.9430									-.8680					
150.UUU	.9430		-.1750	-.1720	-.0180	.0940			-.3890		-.4330	-.2050	-.1190	-.0610	-.0260
157.UUU	.9430							-.1360							
162.UUU	.9430								-.6060						
165.UUU	.9430										-.4570	-.1750	-.1270	-.1190	-.0430
169.UUU	.9430								-.4050						
172.UUU	.9430						.4430								
180.UUU	.9430	.5150	-.0450	.0130	.1330	.4520			.0570		-.5610	-.2[illegible]	-.1[illegible]	-.1740	-.1550

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.UUU	-.1550							-.1680		-.1700
40.UUU	-.0190	-.0810		-.1790	-.2380	-.3790	-.2890			-.1690
75.UUU		-.1240	-.1520	-.1290	-.0030	.0300	.0360	-.0370		
90.UUU		-.0770	-.0900	-.1220	-.0690	-.0350	-.0270	-.0670		
105.UUU				-.1600	-.1790	-.0880	-.0740	-.1010		
110.UUU									-.1870	
120.UUU		-.0460	.0350	-.2130	-.5680	-.2130	-.1090	-.1460	-.1680	
135.UUU				.4210	-.1830	-.3840	-.2330	-.1970		
150.UUU		-.0460	.0500	.2150	.0360	-.3170	-.2570	-.2200		
165.UUU		-.0790		.1700	.0860	-.3980	-.3120	-.1510		
180.UUU		-.1290	-.0580	-.0670						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB22)

MACH (2) = .904 BETA (1) = -8.090

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1480	.6020	.0000	-.7270	-.2750	-.0350			-.0780		-.1430	-.1470	-.0790	-.0220	.0110
20.000	1.1480		-.1080	-.7950	-.2360	-.0790			-.1070		-.1790				
40.000	1.1480		.1260	-.5550	-.2050	-.2370			-.2820		-.3720	-.4200	-.1490	-.0670	-.0070
55.000	1.1480		.1970	-.2670	.0430	.0970			.0580		-.0310				
70.000	1.1480		.3200	-.1250	.1290	.1760			.1060		-.0360	-.6140	.0030	.0670	.0500
90.000	1.1480	.9280	.3360	-.0440	.2050	.2160			.1210		-.0510	-.7320	.0040	.0520	.0460
105.000	1.1480														
110.000	1.1480														
120.000	1.1480		.3290	.0980	.2840	.3470			.2020		-.1460	-.7930	-.0050	.0110	.0250
135.000	1.1480									-.4420					
142.000	1.1480										-.5750	-.5880	-.0290	-.0100	.0110
150.000	1.1480		.2480	.1160	.2850	.5700			.2610						
157.000	1.1480							.5760							
162.000	1.1480								.1500						
165.000	1.1480										-.5350	-.5030	.0050	.0110	.0300
169.000	1.1480								-.0180						
172.000	1.1480						.7620								
180.000	1.1480	.7490	.0080	.0380	.1830	.6140			.2860		-1.0770	-.4950	-.2410	-.1210	-.1370

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0090							-.4620		-.1500
40.000	.0430	-.1900		-.1840	-.2820	-.4200	-.4490			-.1640
70.000		-.0490	-.0590	.0530	.2090	.2140	.1910	.0250		
90.000		-.0120	.0250	.1370	.1660	.1380	.1200	.0150		
105.000				.2150	.1190	.1000	.0800	-.0470		
110.000									-.1800	
120.000		-.0100	.1650	.4200	-.0160	.0180	.0620	.0060	-.1350	
135.000				.3760	.0680	-.0460	.0230	-.0450		
150.000		.0110	.1690	.1920	-.0450	.0220	.0530	-.0890		
165.000		.0340		.2390	.1830	.1050	.0710	-.1990		
180.000		-.0820	.0450	.0890						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB22)

MACH (2) = .902 BETA (2) = -4.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1780	.6280	.0000	-.6310	-.3320	-.0150			-.0570		-.1230	-.1280	-.0610	-.0070	.0270
20.000	1.1780		-.1310	-.6850	-.1870	-.0400			-.0710		-.1500				
40.000	1.1780		.0430	-.6840	-.1390	-.1250			-.1700		-.2620	-.3160	-.0770	-.0200	.0240
55.000	1.1780		.1240	-.4920	.0120	.0600			.0050		-.0840				
75.000	1.1780		.1620	-.3390	.0560	.1090			.0210		-.1060	-.6580	-.0280	.0420	.0260
90.000	1.1780	.8270	.1590	-.2420	.1100	.1370			.0240		-.1240	-.7760	-.0410	.0310	.0230
105.000	1.1780														
110.000	1.1780														
120.000	1.1780		.1770	-.0460	.1980	.2670			.0630		-.1890	-.8330	.0440	.0140	.0240
135.000	1.1780														
142.000	1.1780									-.7510					
150.000	1.1780		.1590	.0520	.2510	.5320			.2060		-.5780	-.5740	-.0250	.0020	.0220
157.000	1.1780							.5090							
162.000	1.1780								.0870						
165.000	1.1780										-.8140	-.4430	-.0270	.0150	.0280
168.000	1.1780								-.0120						
172.000	1.1780						.7820								
180.000	1.1780	.7360	.0020	.0500	.2230	.6540			.3110		-1.1680	-.3210	-.1520	-.0150	-.0050

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0270							-.5750		-.1300
40.000	.0370	-.0560		-.1580	-.2540	-.3770	-.5290			-.1420
70.000		-.0740	-.1160	-.0390	.1230	.1570	.1480	-.0040		
90.000		-.0410	-.0210	.0330	.0630	.0760	.0760	-.0150		
105.000				.0970	-.0070	.0360	.0390	-.0430		
110.000									-.1860	
120.000		-.0120	.1460	.2720	-.2020	-.0490	.0240	-.0270	-.1580	
135.000				.4280	.0555	-.0930	-.0170	-.0700		
150.000		.0140	.1660	.2590	.0210	-.0630	-.0220	-.1290		
165.000		.0220		.2490	.1830	-.0060	-.0290	-.1840		
180.000		-.0190	.0930	.1600						

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBPB22)

MACH (2) = .690 BETA (3) = .080

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3933	.5120
PHI															
.000	1.1980	.6040	.0000	-.6100	-.3320	-.0110			-.0510		-.1130	-.1120	-.0460	-.0010	.0290
20.000	1.1980		-.1810	-.6930	-.2150	-.0230			-.0590		-.1320				
40.000	1.1980		-.0640	-.7590	-.0940	-.0650			-.1130		-.2080	-.2450	-.0400	.0000	.0360
55.000	1.1980		-.0220	-.7010	-.0090	.0240			-.0440		-.1420				
70.000	1.1980		-.0060	-.5810	.0030	.0500			-.0500		-.1850	-.6890	-.0370	.0230	.0680
90.000	1.1980	.6980	-.0170	-.4840	.0330	.0620			-.0630		-.2230	-.7970	-.0540	.0210	.0190
105.000	1.1980														
110.000	1.1980														
125.000	1.1980		.0360	-.2020	.1100	.1710			-.0790		-.3700	-.8110	-.0070	.0170	.0290
135.000	1.1980														
142.000	1.1980									-1.0680					
150.000	1.1980		.0840	-.0190	.2040	.4670			.1360		-.7590	-.4270	-.0260	.0110	.0210
157.000	1.1980							.4030							
162.000	1.1980								-.0020						
165.000	1.1980										-.8710	-.4130	.0220	.0240	.0260
169.000	1.1980								-.0160						
172.000	1.1980						.7650								
180.000	1.1980	.7020	.0190	.0660	.2390	.6770			.3240		-1.1610	-.2960	-.0140	.0030	.0220

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0300							-.5560		-.1280
40.000	.0490	-.0330		-.1490	-.2340	-.3570	-.5630			-.1440
70.000		-.0850	-.1410	-.1350	.0230	.0910	.1120	-.0350		
90.000		-.0420	-.0410	-.0700	-.0610	.0180	.0340	-.0460		
105.000				-.0360	-.1620	-.0270	-.0020	-.0700		
110.000									-.1980	
125.000		-.0010	.1310	.0870	-.4260	-.1180	-.0270	-.0650	-.1720	
135.000				.4550	.0140	-.1890	-.0820	-.1150		
150.000		.0280	.1670	.3150	.0770	-.1750	-.1150	-.1820		
165.000		.0270		.2710	.1870	-.1310	-.1250	-.1800		
180.000		.0260	.1350	.1870						

AMES 11-707 OA12 OPA ORBITER FUSELAGE (RBPB22)

MACH (2) = .899 BETA (4) = 4.250

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1790	.6000	.0000	-.6380	-.3420	-.1240			-.0750		-.1260	-.1400	-.0480	-.0150	.0260
20.000	1.1790		-.2220	-.6970	-.2970	-.0250			-.0660		-.1320				
40.000	1.1790		-.1570	-.7820	-.0640	-.0320			-.0890		-.2140	-.2300	-.0460	-.0060	.0420
55.000	1.1790		-.1450	-.8280	.0040	-.0080			-.0870		-.2450				
70.000	1.1790		-.1550	-.7620	.0170	.0050			-.1040		-.3290	-.7110	-.0590	.0100	.0420
90.000	1.1790	.5650	-.1730	-.7590	-.0200	.0040			-.1410		-.4310	-.8120	-.0570	.0110	.0230
105.000	1.1790														
110.000	1.1790														
125.000	1.1790		-.1060	-.4050	.0490	.0760			-.2140		-.5770	-.7140	-.0680	.0040	.0230
135.000	1.1790														
142.000	1.1790									-1.1610					
150.000	1.1790		-.0040	-.1170	.1250	.3780			.0500		-.8310	-.4660	-.0870	.0180	.0120
157.000	1.1790							.2730							
162.000	1.1790								-.1090						
165.000	1.1790										-.9260	-.4830	-.0610	.0210	-.0070
169.000	1.1790								-.0440						
172.000	1.1790						.7110								
180.000	1.1790	.7030	.0130	.0590	.2210	.6570			.3120		-1.1460	-.3520	-.0780	-.0220	-.0440

X/LB	.5973	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0130							-.5310		-.1330
40.000	.0420	-.0250		-.1490	-.2240	-.3480	-.6230			-.1350
70.000		-.0890	-.1390	-.2150	-.1550	.0030	.0490	-.0760		
90.000		-.0480	-.0520	-.1570	-.2060	-.0650	-.0020	-.1850		
105.000				-.1350	-.3110	-.1160	-.0460	-.1570		
110.000									-.2320	
120.000		-.0130	.1000	-.0650	-.5700	-.1890	-.0750	-.1110	-.1930	
135.000				.4480	-.0330	-.6440	-.1730	-.1890		
150.000		.0130	.1480	.3020	.1050	-.4060	-.2090	-.2350		
165.000		.0420		.2510	.1840	-.3610	-.2410	-.1880		
180.000		-.0040	.1050	.1520						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB22)

MACH (2) = .900 BETA (5) = 8.410

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1150	.5980	.0000	-.7090	-.3020	-.0330			-.0740		-.1470	-.1330	-.0680	-.0210	.0150
25.000	1.1150		-.2690	-.7050	-.3280	-.0240			-.0630		-.1620				
40.000	1.1150		-.2540	-.7080	-.2760	-.0230			-.0790		-.2440	-.2440	-.0700	-.0160	.0270
55.000	1.1150		-.2660	-.7060	-.2360	-.0250			-.1070		-.2990				
75.000	1.1150		-.3040	-.6990	-.2270	-.0240			-.1380		-.4320	-.7650	-.0710	.0130	.0010
90.000	1.1150	.4260	-.3160	-.6910	-.1200	-.0530			-.1960		-.5130	-.7410	-.0830	.0190	.0240
105.000	1.1150														
110.000	1.1150														
120.000	1.1150		-.2300	-.5850	-.1090	-.0350			-.3340		-.6830	-.5020	-.1030	.0200	.0150
135.000	1.1150									-1.2390					
142.000	1.1150								-.0570		-.7390	-.5270	-.1710	.0170	-.0250
150.000	1.1150		-.0840	-.2240	.0300	.2600		.1090							
157.000	1.1150								-.2220						
162.000	1.1150										-.7350	-.5740	-.1740	-.0460	-.0540
165.000	1.1150								-.0770						
169.000	1.1150						.6200								
172.000	1.1150								.2640		-.9310	-.5800	-.1880	-.1010	-.1210
180.000	1.1150	.6440	.0140	.0250	.1830	.5980									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0020							-.4700		-.1510
40.000	.0410	-.0180		-.1380	-.2060	-.3260	-.6300			-.1670
75.000		-.0790	-.1440	-.2360	-.1040	-.0720	.0120	-.0970		
90.000		-.0420	-.0650	-.1870	-.3060	-.1610	-.0490	-.0970		
105.000				-.1740	-.4430	-.2360	-.0860	-.1210		
110.000									-.2200	
120.000		-.0120	.0800	-.1080	-.6590	-.4650	-.1370	-.1270	-.2020	
135.000				.4780	-.0280	-.7760	-.3730	-.2000		
150.000		-.0580	.0520	.1560	.0200	-.4520	-.5690	-.2570		
165.000		-.0610		.1750	.1260	-.4690	-.5090	-.2130		
180.000		-.0780	.0400	.0970						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPB23) (01 MAY 73)

AMES 11-7D7 OA12 CRA ORBITER FUSELAGE

REFERENCE DATA

SREF = 2.421D SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.849D INCHES YMPP = .0000 INCHES
BREF = 39.849D INCHES ZMPP = .0000 INCHES
SCALE = .03DD SCALE

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000
ELEVON = -10.000 RUDFLR = .000

MACH (1) = .598 BETA (1) = -8.03D

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2239	.2711	.3200	.3953	.5125
PHI									-.0190		-.0340	-.0280	-.0075	.0030	.0180
.000	.9680	.6125	.0000	-.5150	-.0600	-.0090			-.0230		-.0440				
20.000	.9680		-.0950	-.4370	-.0880	-.0210			-.0610		-.0960	-.0580	-.0040	.0250	.0530
40.000	.9680		.1510	-.2260	-.0070	-.0530			.1040		.0260				
55.000	.9680		.2540	-.0840	.1210	.1450			.1560		-.0230	-.3070	-.0670	-.0480	-.0660
75.000	.9680		.2760	-.0220	.1390	.1480			.1660		-.0640	-.3960	-.0920	-.0450	-.0700
90.000	.9680	.8110	.2220	-.0330	.1720	.1630									
105.000	.9680										-.2800	-.3200	-.1450	-.1030	-.0970
110.000	.9680								.1670						
120.000	.9680		.1140	-.0080	.1730	.2160				-.3740					
135.000	.9680								-.0700		-.6560	-.2240	-.1330	-.0860	-.0770
142.000	.9680							.3300							
150.000	.9680		-.0230	-.0420	.1270	.3770			-.2180						
157.000	.9680										-.4100	-.1810	-.0980	-.0660	-.0580
162.000	.9680								-.3870						
165.000	.9680														
169.000	.9680						.5250		-.0340		-.6210	-.2460	-.2270	-.3330	-.1750
172.000	.9680														
180.000	.9680	.3510	-.2580	-.1100	.0410	.4140									
X/LB	.5875	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI								-.1520		-.1600					
.000	.0130									-.1570					
40.000	.0450	-.0270		-.1370	-.2330	-.3330	-.1630								
70.000		-.1690	-.0040	.0340	.1970	.1810	.1580	.0510							
90.000		-.1220	-.0060	.1200	.1750	.1110	.0760	-.0030							
105.000				.2170	.1380	.0730	.0370	-.0330							
110.000									-.1450						
120.000		-.1030	.0970	.4150	.0280	-.0290	-.0040	-.0330	-.1150						
135.000				.1720	-.0850	-.1690	-.0970	-.1340							
150.000		-.0530	.0850	.0440	-.1750	-.0760	-.0350	-.1270							
165.000		-.0330		.1480	.0920	.0120	-.0180	-.1490							
180.000		-.1300	-.0500	-.0440											

DATE 17 SEP 75 TABULATED PRESSURE DATA - OA12A (RBP823)

AMES 11-707 OA12 CEA ORBITER FUSELAGE

MACH (1) = .990 BETA (2) = -3.970

SECTION (1):ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3386	.3953	.5125
PHI															
.000	1.0100	.6515	.0000	-.4930	-.0340	.0110			.0010		-.0220	-.0140	.0090	.0170	.0330
25.000	1.0100		-.1070	-.4280	-.0510	.0040			.0010		-.0280				
40.000	1.0100		.0580	-.2810	-.0020	.0040			-.0060		-.0630	-.0430	.0080	.0320	.0990
55.000	1.0100		.1180	-.1950	.0710	.0020			.0440		-.0330				
70.000	1.0100		.1020	-.1800	.0420	.0020			.0310		-.0880	-.0670	-.0190	-.0430	-.0980
90.000	1.0100	.6020	.0330	-.1720	.0070	.0050			.0260		-.1330	-.0440	-.0180	-.0620	-.0820
105.000	1.0100														
110.000	1.0100								.0520		-.3080	-.3210	-.1350	-.0840	-.0810
125.000	1.0100		-.0250	-.1050	.1150	.1530				-.4430					
135.000	1.0100								-.1520		-.6120	-.2110	-.1170	-.0710	-.0540
142.000	1.0100							.2670							
150.000	1.0100		-.0880	-.0780	.1160	.3520			-.2950		-.4460	-.1830	-.0980	-.0530	-.0480
157.000	1.0100														
162.000	1.0100								-.4030						
165.000	1.0100														
169.000	1.0100						.5250		.0630		-.5700	-.1880	-.1620	-.0980	-.0880
172.000	1.0100														
180.000	1.0100	.3780	-.2520	-.0840	.0840	.4640									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0270							-.1480		-.1560
40.000	.0560	-.0020		-.1360	-.2150	-.3390	-.1940			-.1570
70.000		-.2030	-.1300	-.0280	.1420	.1350	.1230	.0300		
90.000		-.1480	-.0480	.0500	.1020	.0580	.0490	-.0210		
105.000				.1120	.0550	.0230	.0040	-.0510		
110.000									-.1370	
120.000		-.0910	.0940	.3090	-.0680	-.0660	-.0260	-.0450	-.1160	
135.000				.2870	-.0510	-.1570	-.0860	-.1040		
150.000		-.0380	.0840	.1110	-.1120	-.1250	-.0810	-.1310		
165.000		-.0310		.1280	.1020	-.0570	-.0850	-.1350		
180.000		-.0530	.0290	.0670						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBP823)

MACH (1) = .599 BETA (3) = .080

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0440	.6280	.0000	-.4880	-.0360	.0200			.0070		-.0140	-.0070	.0100	.0200	.0380
20.000	1.0440		-.1580	-.4380	-.0360	.0120			.0080		-.0260				
40.000	1.0440		-.0800	-.3430	-.0130	.0200			.0020		-.0680	-.0610	-.0010	.0230	.0550
55.000	1.0440		-.0450	-.3090	.0000	.0250			-.0130		-.0790				
70.000	1.0440		-.0790	-.2890	-.0320	.0190			-.0320		-.1350	-.4040	-.1280	-.0640	-.1090
90.000	1.0440	.5530	-.1460	-.3030	.0100	.0220			-.0430		-.1730	-.4630	-.1250	-.0700	-.0770
105.000	1.0440														
110.000	1.0440														
120.000	1.0440		-.1610	-.2040	.0460	.0820			-.0760		-.3230	-.3100	-.1190	-.0650	-.0570
135.000	1.0440									-.5060					
142.000	1.0440								-.2300		-.5590	-.2020	-.0980	-.0520	-.0390
150.000	1.0440		-.1500	-.1220	.0860	.3000		.1760							
157.000	1.0440								-.3930						
162.000	1.0440										-.4630	-.1780	-.0920	-.0520	-.0330
165.000	1.0440								-.4220						
169.000	1.0440						.5480								
172.000	1.0440								.0180		-.5440	-.1580	-.1140	-.0550	-.0290
180.000	1.0440	.3910	-.2250	-.0760	.1020	.4880									

X/LB	.5973	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0300							-.1460		-.1520
40.000	.0570	.0110		-.1230	-.1990	-.3430	-.2180			-.1450
70.000		-.2190	-.1750	-.0790	.0800	.0920	.0940	.0070		
90.000		-.1570	-.0770	-.0210	.0180	.0150	.0150	-.0390		
105.000				-.0030	-.0330	-.0240	-.0250	-.0690		
110.000									-.1260	
120.000		-.0720	.0840	.1370	-.2050	-.1120	-.0500	-.0580	-.1260	
135.000				.3490	-.0460	-.1670	-.0930	-.1120		
150.000		-.0270	.1080	.1960	-.0280	-.1730	-.1330	-.1530		
165.000		-.0190		.1690	.0930	-.1370	-.1450	-.1340		
180.000		-.0170	.0670	.0600						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7D7 OA12 O2A ORBITER FUSELAGE (RBPB23)

MACH (1) = .990 BETA (4) = 4.170

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	-.0010	.6410	.0000	-.4930	-.0350	.0120			.0040		-.0220	-.0130	.0070	.0250	.0310
25.000	1.0010		-.2170	-.4560	-.0370	.0090			.0050		-.0320				
40.000	1.0010		-.1840	-.4070	-.0480	.0080			-.0050		-.1090	-.1020	-.0460	-.0010	.0370
55.000	1.0010		-.2130	-.4290	-.0630	-.0310			-.0640		-.1280				
70.000	1.0010		-.2690	-.4200	-.1000	-.0320			-.0820		-.1750	-.4250	-.1480	-.0830	-.1190
90.000	1.0010	.4000	-.3380	-.4270	-.0530	-.0370			-.1030		-.2110	-.4660	-.1270	-.0710	-.0750
105.000	1.0010														
110.000	1.0010														
120.000	1.0010		-.3090	-.3140	-.0280	-.0040			-.2040		-.3350	-.2990	-.1080	-.0520	-.0450
135.000	1.0010									-.6110					
142.000	1.0010										-.5030	-.1930	-.0940	-.0500	-.0320
150.000	1.0010		-.2390	-.1940	.0270	.2170			-.3310						
157.000	1.0010							.0350							
162.000	1.0010								-.5410						
165.000	1.0010										-.4680	-.1760	-.0950	-.0480	-.0330
169.000	1.0010								-.4750						
172.000	1.0010						.4920								
180.000	1.0010	.3890	-.2380	-.0870	.0900	.4630			-.1040		-.5620	-.1780	-.1340	-.0840	-.0840

X/LB	.5873	.6626	.7380	.7889	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0280							-.1470		-.1530
40.000	.0520	.0090		-.1070	-.1820	-.3340	-.2560			-.1520
70.000		-.2350	-.1990	-.1240	.0110	.0480	.0620	-.0090		
90.000		-.1630	-.1080	-.0940	-.0510	-.0240	-.0160	-.0550		
105.000				-.0950	-.1120	-.0620	-.0500	-.0910		
110.000									-.1680	
120.000		-.0780	.0480	-.0460	-.3570	-.1580	-.0750	-.0810	-.1430	
135.000				.3930	-.0980	-.2320	-.1390	-.1310		
150.000		-.0300	.0920	.2410	-.0040	-.2590	-.1860	-.1800		
165.000		-.0310		.1820	.0970	-.2540	-.2090	-.1340		
180.000		-.0500	.0370	.0720						

AMES 11-7ft OA12 02A ORBITER FUSELAGE (RBPB23)

MACH (1) = .596 BETA (5) = 0.250

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.9710	.5840	.0000	-.5140	-.0550	-.0070			-.0150		-.0330	-.0210	-.0050	.0040	.0190
20.000	.9710		-.2830	-.4930	-.0590	-.010?			-.0150		-.0490				
40.000	.9710		-.3170	-.4700	-.0940	-.0360			-.0640		-.1820	-.1680	-.1010	-.0470	.0080
55.000	.9710		-.3850	-.5390	-.1260	-.0930			-.1140		-.1630				
75.000	.9710		-.4540	-.5560	-.1620	-.0720			-.1210		-.2070	-.4330	-.1530	-.0930	-.1050
90.000	.9710	.2350	-.5240	-.5550	-.1120	-.0830			-.1500		-.2410	-.4650	-.1250	-.0680	-.0690
105.000	.9710														
110.000	.9710														
120.000	.9710		-.4830	-.4200	-.1030	-.0890			-.3180		-.3420	-.2950	-.1030	-.0510	-.0420
135.000	.9710														
142.000	.9710									-.8420					
150.000	.9710		-.3280	-.2670	-.0480	.1100			-.4290		-.4740	-.1980	-.1070	-.0630	-.0430
157.000	.9710							-.1320							
162.000	.9710								-.6980						
165.000	.9710										-.4780	-.1800	-.1160	-.0850	-.0750
169.000	.9710								-.5430						
172.000	.9710						.4020								
180.000	.9710	.3680	-.2540	-.1150	.0470	.4020			-.0540		-.6030	-.2260	-.1940	-.2650	-.1810

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0110							-.1490		-.1500
40.000	.0260	-.0020		-.1050	-.1780	-.3370	-.2850			-.1650
70.000		-.2470	-.2250	-.1720	-.0260	.0190	.0410	-.0210		
90.000		-.1710	-.1430	-.1520	-.0890	-.0560	-.0310	-.0720		
105.000				-.1690	-.1800	-.1030	-.0740	-.1080		
110.000									-.1670	
120.000		-.0940	.0220	-.1380	-.4910	-.2110	-.1080	-.1010	-.1530	
130.000				.3960	-.1460	-.3360	-.2000	-.1730		
150.000		-.0390	.0450	.2030	-.0750	-.3530	-.2780	-.2300		
165.000		-.1000		.1380	.0400	-.4450	-.3380	-.1750		
180.000		-.1250	-.0510	-.0320						

AMES 11-7X7 OA12 OBA ORBITER FUSELAGE (RBPB23)

MACH (2) = .903 BETA (1) = -8.140

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1450	.7480	.0000	-.7250	.0130	.0240			-.0080		-.0710	-.1900	-.0520	.0460	.0580
25.000	1.1450		.0910	-.6370	-.0620	.0090			-.0140		-.0810				
40.000	1.1450		.2810	-.3450	.0030	-.0280			-.0590		-.1480	-.2000	-.0480	.0260	.0900
55.000	1.1450		.3610	-.1440	.1800	.1840			.1400		.0290				
70.000	1.1450		.3780	-.0870	.1640	.2130			.1520		-.0020	-.5850	-.1100	.0180	-.0220
90.000	1.1450	.9930	.3050	-.0660	.2120	.2420			.1670		-.0380	-.7240	-.1160	-.0120	-.0290
105.000	1.1450														
115.000	1.1450														
125.000	1.1450		.1770	-.0290	.2230	.3290			.2720		-.2080	-.8370	-.1330	-.0650	-.0650
135.000	1.1450									-.4950					
142.000	1.1450								.2000		-.7020	-.6850	-.0980	-.0510	-.0360
150.000	1.1450		.0410	-.0930	.1810	.5230		.5310							
157.000	1.1450								.0730						
162.000	1.1450										-.5840	-.5500	-.0510	-.0280	-.0110
165.000	1.1450								-.1410						
169.000	1.1450						.7160								
172.000	1.1450								.1970		-1.1100	-.4730	-.3320	-.1940	-.1130
180.000	1.1450	.5060	-.2330	-.1930	.0950	.5750									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0710							-.4380		-.1460
40.000	.1190	.0530		-.0790	-.1860	-.2970	-.3970			-.1460
75.000		-.2440	-.3100	-.0310	.1760	.1930	.1840	.0330		
90.000		-.2060	-.1490	.0810	.1240	.1080	.1080	.0200		
105.000				.1650	.0900	.0650	.0650	-.0050		
115.000									-.1610	
120.000		-.1880	.0480	.4250	-.0530	-.0400	.0290	-.0070	-.1290	
135.000				.2700	-.0410	-.1380	-.0330	-.0940		
150.000		-.1060	.0800	.0830	-.1680	-.0520	.0120	-.1100		
165.000		-.0780		.1340	.1010	.0220	.0210	-.1970		
180.000		-.1380	-.0100	.0350						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBPB23)

MACH (2) = .902 BETA (2) = -4.030

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1508	.1581	.1732	.1958	.2259	.2711	.3200	.3993	.5120
PHI															
.000	1.1880	.7840	.0000	-.6180	.0490	.0430			.0130		-.0520	-.0770	-.0370	.0280	.0780
20.000	1.1880		.0650	-.6850	-.0120	.0370			.0130		-.0650				
40.000	1.1880		.1860	-.4910	.0220	.0900			-.0010		-.1080	-.1690	-.0450	.0450	.0990
55.000	1.1880		.2260	-.3410	.1010	.1300			.0780		-.0340				
70.000	1.1880		.2030	-.2590	.0840	.1470			.0810		-.0820	-.6310	-.1190	-.0070	-.0530
90.000	1.1880	.8190	.1260	-.2480	.1320	.1700			.0890		-.1270	-.7680	-.1350	-.0200	-.0390
105.000	1.1880														
115.000	1.1880								.1510		-.2770	-.8730	-.1680	-.0350	-.0410
120.000	1.1860		.0290	-.1710	.1620	.2710									
135.000	1.1880									-.7170					
142.000	1.1880								.1550		-.7050	-.6520	-.0680	-.0170	-.0190
150.000	1.1880		-.0450	-.1990	.1730	.5020		.4810							
157.000	1.1880								.0170						
162.000	1.1880										-.8510	-.4720	-.0570	.0050	-.0040
165.000	1.1880								-.1250						
169.000	1.1880						.7400								
172.000	1.1880								.2150		-1.2190	-.4160	-.2620	-.0340	-.0590
180.000	1.1850	.5160	-.2380	-.1980	.1420	.6200									

X/LB	.5073	.6626	.7380	.7869	.8283	.8948	.9262	.9639	1.0015	1.0092
PHI										
.000	.0890							-.5390		-.1220
20.000	.1260	.0780		-.0540	-.1550	-.2760	-.5330			-.1340
40.000		-.2760	-.3400	-.1340	.0750	.1400	.1470	.0070		
70.000		-.2260	-.2020	-.0400	.0020	.0530	.0690	-.0030		
90.000				.0270	-.0600	.0010	.0250	-.0350		
103.000									-.1710	
110.000									-.1420	
120.000		-.1720	.0220	.2830	-.2730	-.0880	.0000	-.0340		
135.000				.3420	-.0610	-.1550	-.0540	-.0940		
150.000		-.0950	.0800	.1340	-.1020	-.1340	-.0620	-.1450		
165.000		-.0790		.1550	.0840	-.0820	-.0760	-.1730		
180.000		-.0850	.0280	.0820						

AMES 11-7X7 OA12 OBA ORBITER FUSELAGE (BBB23)

MACH (2) = .901 BETA (3) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3236	.3953	.9125
PHI															
.000	1.1850	.7730	.0000	-.5970	.0280	.0450			.0130		-.0480	-.0720	-.0250	.0320	.0820
25.000	1.1850		.0170	-.6180	.0240	.0430			.0170		-.0570				
40.000	1.1850		.0830	-.6030	.0310	.0520			.0150		-.0990	-.1630	-.0530	.0380	.0590
55.000	1.1850		.0870	-.5870	.0310	.0780			.0260		-.1120				
75.000	1.1850		.0420	-.4980	.0280	.0910			.0140		-.1780	-.6590	-.1410	-.0220	-.0580
90.000	1.1850	.0870	-.0390	-.4670	.0720	.1130			.0160		-.2270	-.7970	-.1880	-.0130	-.0260
105.000	1.1850														
115.000	1.1850														
125.000	1.1850		-.1140	-.3740	.1050	.2050			.0280		-.4510	-.8990	-.1560	-.0440	-.0160
135.000	1.1850														
142.000	1.1850									-.9990					
150.000	1.1850		-.1240	-.2930	.1450	.4560			.0580		-.8380	-.5730	-.1450	.0180	.0480
157.000	1.1850							.3930							
162.000	1.1850								-.0580						
165.000	1.1850										-.9260	-.4630	-.0140	.0260	.0540
169.000	1.1850								-.1210						
172.000	1.1850						.7250								
180.000	1.1850	.5340	-.2310	-.1560	.1590	.6330			.2240		-1.2220	-.4140	-.0130	.0310	-.0430

X/LB	.5873	.8626	.7380	.7889	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0980							-.5460		-.1170
40.000	.1220	.0080		-.0380	-.1320	-.2640	-.5620			-.1220
75.000		-.2840	-.3090	-.2520	-.0610	.0480	.1120	-.0250		
90.000		-.2200	-.1750	-.1480	-.1730	-.0180	.0200	-.0380		
105.000				-.1010	-.2650	-.0590	-.0090	-.0760		
115.000									-.1790	
125.000		-.1310	.0360	.0770	-.4320	-.1310	-.0380	-.0660	-.1580	
135.000				.3310	-.0700	-.1920	-.0940	-.1260		
150.000		-.0780	.0720	.2280	-.0320	-.2290	-.1480	-.1860		
165.000		-.0680		.1790	.0930	-.2080	-.1700	-.1680		
180.000		-.0530	.0440	.0980						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBP523)

MACH (2) = .903 BETA (4) = 4.220

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1906	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5120
PHI															
.000	1.1620	.7690	.0000	-.6180	.0460	.0430			.0120		-.0580	-.0810	-.0350	.0240	.0760
20.000	1.1620		-.0320	-.6270	.0340	.0390			.0130		-.0720				
40.000	1.1620		-.0110	-.6970	.0340	.0480			.0030		-.1510	-.1880	-.1000	.0090	.0740
55.000	1.1620		-.0270	-.7150	.0210	.0270			-.0290		-.1890				
70.000	1.1620		-.1100	-.6420	.0120	.0440			-.0380		-.2860	-.6950	-.1520	-.0450	-.0580
90.000	1.1620	.5630	-.1930	-.5970	.0470	.0550			-.0470		-.3490	-.7920	-.1760	-.0240	-.0320
105.000	1.1620														
110.000	1.1620														
120.000	1.1620		-.2290	-.5390	.0470	.1310			-.0890		-.5710	-.7590	-.1600	-.0650	-.0120
135.000	1.1620														
142.000	1.1620									-1.1310					
150.000	1.1620		-.1960	-.3870	.0910	.3820			.0190		-.5950	-.5520	-.2660	.0280	.0650
157.000	1.1620							.2710							
162.000	1.1620								-.1590						
165.000	1.1620										-.6300	-.5760	-.2490	.0340	.0000
169.000	1.1620								-.1350						
172.000	1.1620						.6750								
180.000	1.1620	.5260	-.2340	-.1720	.1430	.6130			.2040		-1.1980	-.4090	-.2010	-.0360	-.0550

X/LB	.5973	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0910							-.5410		-.1200
40.000	.1060	.0870		-.0320	-.1180	-.2580	-.6010			-.1400
70.000		-.2800	-.2850	-.3030	-.2360	-.0400	.0330	-.0610		
90.000		-.1990	-.1660	-.2300	-.3470	-.1350	-.0370	-.0810		
105.000				-.1930	-.4080	-.1760	-.0670	-.1070		
110.000									-.2140	
120.000		-.1160	-.0010	-.1080	-.5550	-.3100	-.0850	-.1060	-.1810	
135.000				.3210	-.0940	-.6460	-.1580	-.1650		
150.000		-.0650	.0560	.2460	.0220	-.4570	-.2250	-.2160		
165.000		-.0660		.1730	.0990	-.4000	-.3200	-.1730		
180.000		-.0910	.0210	.0750						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7X7 OA12 02A ORBITER FUSELAGE (RBFB23)

MACH (2) = .901 BETA (5) = 8.350

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1959	.2259	.2711	.3260	.3959	.5125
PHI														
.000	1.157U	.7415	.0046	-.7020	.0220	.0210			-.0650		-.0720	-.0880	-.0440	.0190	.0560
20.000	1.157U		-.0900	-.6850	.0120	.0240			-.0010		-.0870				
40.000	1.157U		-.1220	-.7720	-.0040	.0140			-.0360		-.2170	-.2530	-.1620	-.0490	.0430
55.000	1.157U		-.1410	-.7290	-.0610	-.0150			-.0730		-.2420				
70.000	1.157U		-.2650	-.7490	-.1390	.0070			-.0810		-.3330	-.7160	-.1570	-.0640	-.0490
90.000	1.157U	.4280	-.3350	-.6350	-.1320	.0120			-.1050		-.4120	-.7650	-.1640	-.0220	-.0250
105.000	1.157U														
110.000	1.157U														
120.000	1.157U		-.3480	-.6340	-.0420	.0470			-.2160		-.5470	-.5560	-.2370	.0030	-.0690
135.000	1.157U									-1.1670					
142.000	1.157U														
150.000	1.157U		-.2640	-.4530	.0110	.2790			-.0780		-.6930	-.5530	-.3250	.0130	-.0250
157.000	1.157U							.1220							
162.000	1.157								-.2610						
165.000	1.157U										-.6440	-.5410	-.2850	-.0190	-.0360
169.000	1.157U								-.1620						
172.000	1.157U						.5870								
180.000	1.157U	.5130	-.2330	-.1740	.0970	.5540			.1720		-1.1280	-.4760	-.2850	-.1420	-.1200

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0754							-.4460		-.1430
40.000	.0790	.0670		-.0330	-.1000	-.2530	-.6660			-.1580
70.000		-.2520	-.2710	-.3170	-.2860	-.1410	-.0130	-.0890		
90.000		-.1740	-.1580	-.2540	-.3910	-.2350	-.0760	-.0970		
105.000				-.2280	-.4830	-.3290	-.1100	-.1210		
110.000									-.2280	
120.000		-.1540	-.1040	-.1380	-.6280	-.6240	-.1450	-.1210	-.1920	
135.000				.4010	-.0330	-.6970	-.4100	-.1770		
150.000		-.0950	.0180	.1250	-.1030	-.5410	-.6300	-.3120		
165.000		-.1020		.1350	.0680	-.5110	-.5290	-.2020		
180.000		-.1300	-.0140	.0350						

AMES 11-7X7 OA12 OPA ORBITER FUSELAGE (RBPB24) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 10.000 RUDDER = .000
ELEVON = -10.000 RUDFLR = .000

MACH (1) = .597 BETA (1) = -8.060

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9440	.7670	.0000	-.3110	.0330	.0640			.0540		.0270	.0370	.0550	.0680	.0890
20.000	.9440		.1720	-.2190	.0400	.0710			.0600		.0350				
40.000	.9440		.3410	-.0370	.1340	.1090			.0930		.0400	.0510	.0970	.1140	.1470
55.000	.9440		.3810	.0320	.1870	.1670			.1280		.0420				
70.000	.9440		.3250	.0120	.1230	.1530			.1030		-.0220	-.3330	-.1190	-.0730	-.1540
90.000	.9440	.7760	.1750	-.0660	.1420	.1480			.0930		-.0840	-.4660	-.1720	-.1390	-.1760
105.000	.9440														
110.000	.9440														
120.000	.9440		-.0560	-.1270	.0900	.1630			.1900		-.4140	-.4290	-.2440	-.2110	-.2210
135.000	.9440														
142.000	.9440									-.4640					
150.000	.9440		-.2340	-.2030	.0230	.3150			-.1720		-.8180	-.2690	-.1740	-.1310	-.1310
157.000	.9440							.2600							
162.000	.9440								-.3390						
165.000	.9440										-.4570	-.2130	-.1360	-.1230	-.1160
169.000	.9440								-.5540						
172.000	.9440						.4640								
180.000	.9440	.1260	-.4960	-.2690	-.0420	.3610			-.1540		-.6530	-.2570	-.2700	-.3490	-.1670

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0940							-.1260		-.1550
40.000	.1550	.1080		-.0550	-.1490	-.2730	-.1350			-.1530
70.000		-.2970	-.1520	.0020	.1880	.1840	.1670	.0600		
90.000		-.2410	-.0700	.0960	.1720	.1100	.0810	-.0040		
105.000				.2300	.1470	.0740	.0330	-.0320		
110.000									-.1560	
120.000		-.2180	.0200	.4370	.0330	-.0550	-.0340	-.0550	-.1360	
135.000				.0370	-.2020	-.2540	-.1800	-.1930		
150.000		-.1200	.0020	-.0340	-.2740	-.1120	-.0600	-.1370		
165.000		-.1130		.0270	.0190	-.0240	-.0450	-.1620		
180.000		-.1450	-.0660	-.0520						

AMES 11-7X7 OA12 O2A ORBITER FUSELAGE (RBF924)

MACH (1) = .599 BETA (2) = -3.990

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	.9860	.8150	.6000	-.2850	.0630	.0890			.0710		.0480	.0510	.0670	.0820	.1090
20.000	.9870		.1580	-.2120	.0710	.0900			.0850		.0470				
40.000	.9690		.2600	-.0970	.1140	.1250			.1050		.0240	.0160	.0730	.1010	.1310
55.000	.9880		.2410	-.0960	.1110	.0850			.0510		-.0250				
70.000	.9880		.1550	-.1270	.0240	.0820			.0340		-.0960	-.4010	-.1670	-.1180	-.1790
90.000	.9880	.6590	.0010	-.2010	.0700	.0820			.0250		-.1490	-.5210	-.2700	-.1540	-.1870
105.000	.9880														
110.000	.9880														
120.000	.9880		-.1790	-.2070	.0490	.1230			.0970		-.4250	-.4160	-.2210	-.1770	-.1630
135.000	.9880														
142.000	.9880									-.5160					
150.000	.9880		-.2950	-.2480	.0300	.3060			-.2350		-.7490	-.2510	-.1490	-.1130	-.1110
157.000	.9880							.2140							
162.000	.9880								-.4060						
165.000	.9880										-.4710	-.2050	-.1170	-.0880	-.0940
169.000	.9880								-.5610						
172.000	.9880						.4950								
180.000	.9880	.1380	-.4820	-.1910	.0000	.4150			-.1230		-.5800	-.1920	-.1600	-.1480	-.1140

X/LB	.5873	.6626	.7380	.7869	.8283	.8818	.9252	.9639	1.0015	1.0392
PHI										
.000	.1190							-.1250		-.1510
40.000	.1530	.1170		-.0390	-.1320	-.2790	-.1760			-.1560
70.000		-.3660	-.2310	-.0870	.1100	.1310	.1310	.0430		
90.000		-.2640	-.1150	.0160	.0960	.0500	.0500	-.1460		
105.000				.1220	.0530	.0260	.0050	-.0480		
110.000									-.1510	
120.000		-.1860	.0410	.3330	-.0760	-.1850	-.1460	-.0540	-.1260	
135.000				.1800	-.1340	-.1960	-.1360	-.1480		
150.000		-.1020	.0340	.0410	-.1950	-.1500	-.0870	-.1320		
165.000		-.0990		.0640	.0320	-.1140	-.1160	-.1290		
180.000		-.0810	.0420	.0320						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBFB24)

MACH (1) = .6UU BETA (3) = .1U0

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.UUU	.U075	.U188	.U339	.U6U2	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.32UU	.3953	.512U
PHI															
.UUU	.975U	.827U	.UUUU	-.283U	.U64U	.U91U			.U76U		.U5UU	.U54U	.U71U	.U84U	.111U
2U.UUU	.975U		.11ZU	-.24UU	.U67U	.U94U			.U79U		.U41U				
4U.UUU	.975U		.135U	-.175U	.U67U	.U97U			.U67U		-.U41U	-.U51U	.U15U	.U62U	.1U8U
55.UUU	.975U		.U77U	-.226U	.U13U	.U01U			-.U26U		-.U96U				
7U.UUU	.975U		-.U35U	-.271U	-.U78U	.U16U			-.U3UU		-.152U	-.447U	-.2U7U	-.148U	-.212U
9U.UUU	.975U	.52UU	-.192U	-.331U	-.U65U	.U21U			-.U39U		-.198U	-.542U	-.2U9U	-.154U	-.179U
1U5.UUU	.975U														
11U.UUU	.975U														
12U.UUU	.975U		-.314U	-.297U	.U03U	.U74U			-.U17U		-.43ZU	-.374U	-.182U	-.134U	-.134U
135.UUU	.975U														
142.UUU	.975U									-.574U					
15U.UUU	.975U		-.357U	-.281U	.U17U	.273U			-.3U2U		-.67UU	-.228U	-.12ZU	-.U86U	-.U88U
157.UUU	.975U							.14UU							
162.UUU	.975U								-.5U4U						
165.UUU	.975U										-.493U	-.197U	-.1U5U	-.U65U	-.U65U
169.UUU	.975U								-.578U						
172.UUU	.975U						.489U								
18U.UUU	.975U	.17UU	-.463U	-.175U	.U21U	.433U			-.1U8U		-.559U	-.166U	-.115U	-.U68U	-.U55U

X/LB	.5873	.6626	.738U	.7869	.8283	.8848	.9262	.9639	1.UU15	1.U392
PHI										
.UUU	.113U							-.127U		-.143U
4U.UUU	.134U	.112U		-.U33U	-.12GU	-.287U	-.2U5U			-.141U
7U.UUU		-.388U	-.278U	-.159U	.U33U	.U68U	.U9UU	.U17U		
9U.UUU		-.272U	-.161U	-.U78U	-.U24U	.U03U	.U13U	-.U32U		
1U5.UUU				-.U43U	-.U46U	-.U26U	-.U29U	-.U7UU		
11U.UUU									-.135U	
12U.UUU		-.151U	.U46U	.1610	-.2U9U	-.127U	-.U63U	-.U65U	-.13UU	
135.UUU				.265U	-.1U2U	-.2U1U	-.12UU	-.132U		
15U.UUU		-.U98U	.U36U	.1720	-.U89U	-.192U	-.147U	-.16UU		
165.UUU		-.U71U		.U98U	.U81U	-.175U	-.156U	-.128U		
18U.UUU		-.U54U	.U25U	.U31U						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7X7 OA12 OEA OFBITER FUSELAGE (RBPB24)

MACH (1) = .595 BETA (4) = 4.15

SECTION (1)OFBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
BM:															
.000	.9450	.8300	.0000	-.2840	.0480	.1850			.0750		.0490	.0580	.0740	.0830	.1050
2.000	.9450		.0370	-.2690	.0490	.0780			.0620		.0310				
4.000	.9430		-.0630	-.2690	.0480	.0440			.0050		-.1320	-.1410	-.0570	.0070	.0610
55.000	.9450		-.0660	-.3540	-.0750	-.0180			-.0990		-.1610				
7.000	.9450		-.2340	-.4030	-.1480	-.0410			-.0850		-.1950	-.4690	-.2260	-.1770	-.2230
9.000	.9450	.3840	-.3850	-.4550	-.0660	-.0260			-.1920		-.2320	-.5390	-.1990	-.1480	-.1670
10.000	.9450														
110.000	.9450														
120.000	.9450		-.4580	-.4000	-.0430	.1220			-.1310		-.4210	-.3370	-.1470	-.1100	-.1020
135.000	.9450									-.6150					
142.000	.9450								-.3870		-.5870	-.2030	-.1070	-.0670	-.0540
150.000	.9450		-.4270	-.3460	-.0190	.2110		.0170							
157.000	.9450								-.6350						
162.000	.9450										-.4990	-.1740	-.0950	-.0510	-.0660
165.000	.9450								-.6120						
169.000	.9450						.4380								
172.000	.9450								-.1280		-.5770	-.1760	-.1450	-.1110	-.1120
180.000	.9450	.1740	-.4580	-.2140	.0680	.4110									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
BM:										
.000	.1140							-.1240		-.1420
40.000	.1110	.0870		-.0230	-.1110	-.2850	-.2310			-.1430
70.000		-.3830	-.2910	-.2140	-.0520	.0110	.0530	-.1070		
90.000		-.2790	-.1660	-.1840	-.1150	-.0530	-.0210	-.0550		
105.000				-.1860	-.1460	-.0810	-.0560	-.0940		
115.000									-.1620	
120.000		-.1550	-.0210	-.1420	-.3450	-.1760	-.0840	-.0880	-.1470	
135.000				.3270	-.1150	-.2460	-.1460	-.1410		
150.000		-.0790	.0340	.2450	-.0670	-.2800	-.2040	-.1920		
165.000		-.0700		.1420	.0780	-.2710	-.2140	-.1430		
180.000		-.0740	.0060	.0380						

AMES 11-7ft OA12 OBA ORBITER FUSELAGE (RBPB24)

MACH (1) = .999 BETA (5) = 8.230

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3208	.3953	.5128
PHI															
.000	.9060	.7750	.0000	-.3060	.0340	.0660			.0540		.0260	.0420	.0570	.0670	.0870
20.000	.9060		-.0450	-.3070	.0140	.0520			.0380		.0000				
40.000	.9060		-.1440	-.3600	-.0620	-.0400			-.0880		-.2560	-.2590	-.1560	-.0610	.0530
55.000	.9060		-.1970	-.4910	-.1560	-.1600			-.1640		-.2220				
70.000	.9060		-.4110	-.5390	-.2090	-.0870			-.1260		-.2340	-.4770	-.2400	-.1940	-.2320
90.000	.9060	.2050	-.5610	-.5780	-.1150	-.0700			-.1400		-.2550	-.5330	-.1900	-.1380	-.1630
105.000	.9060														
110.000	.9060														
120.000	.9060		-.5910	-.5100	-.0940	-.0480			-.2310		-.4070	-.3170	-.1280	-.0870	-.0960
135.000	.9060														
142.000	.9060									-.8030					
150.000	.9060		-.5080	-.4160	-.0710	.1240			-.4640		-.5330	-.1950	-.1030	-.0680	-.0760
157.000	.9060							-.1280							
162.000	.9060								-.7790						
165.000	.9060										-.5050	-.1760	-.1070	-.0730	-.0910
169.000	.9060								-.6720						
172.000	.9050						.3540								
180.000	.9060	.1530	-.4760	-.2600	-.0340	.3530			-.1760		-.6240	-.2350	-.2350	-.3430	-.1630

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0910							-.1250		-.1510
40.000	.0760	.0700		-.0240	-.1060	-.2900	-.2690			-.1570
70.000		-.3930	-.3230	-.2540	-.0990	-.0200	.0310	-.0160		
90.000		-.2960	-.2480	-.2550	-.1600	-.0850	-.0470	-.0710		
105.000				-.2500	-.2290	-.1260	-.0880	-.1140		
110.000									-.1620	
120.000		-.1790	-.0350	-.1580	-.5140	-.2280	-.1260	-.1090	-.1610	
135.000				.3790	-.1480	-.3200	-.2010	-.1660		
150.000		-.1040	.0120	.1650	-.1680	-.4160	-.3280	-.2820		
165.000		-.1030		.1050	.0040	-.4380	-.3410	-.1680		
180.000		-.1410	-.0680	-.0580						

AMES 11-7U7 OA12 OBA ORBITER FUSELAGE (RBFB24)

MACH (2) = .900 BETA (1) = -8.150

SECTION : 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0775	.0975	.1198	.1339	.1602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3255	.3953	.5127
PHI															
.000	1.1290	.6880	.0000	-.4620	.0780	.1980			.0880		.0330	.0020	.0240	.0710	.1430
25.000	1.1290		.3180	-.3170	.0850	.1160			.0930		.0380				
40.000	1.1290		.4510	-.0720	.1790	.1550			.1290		.0470	-.0170	.0560	.1260	.2000
55.000	1.1290		.4750	.0020	.2190	.2250			.1920		.0860				
70.000	1.1290		.4150	-.0170	.1460	.2230			.1820		.0310	-.5610	-.2550	-.0510	-.0730
90.000	1.1290	.8930	.2480	-.1160	.1790	.2330			.1960		-.0470	-.7090	-.2790	-.1110	-.1030
105.000	1.1290														
115.000	1.1290														
120.000	1.1290		.0420	-.2000	.1340	.2820			.3350		-.3640	-.8830	-.3520	-.1750	-.1590
135.000	1.1290														
142.000	1.1290									-.5150					
150.000	1.1290		-.1770	-.4420	.0800	.4720			.1280		-.8110	-.7470	-.3640	-.0740	-.0870
157.000	1.1290							.4820							
162.000	1.1290								.0010						
165.000	1.1290										-.6380	-.5990	-.2110	-.0360	-.0800
169.000	1.1290								-.2520						
172.000	1.1290						.6630								
180.000	1.1290	.3020	-.4560	-.5540	.0320	.5240			.1960		-1.0800	-.5370	-.3670	-.1500	-.1060

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
.000	.1630							-.4740		-.1710
40.000	.2330	.2190		.0390	-.0690	-.2050	-.5510			-.1640
70.000		-.3900	-.6480	-.1440	.0670	.0590	.0990	-.0220		
90.000		-.3170	-.5280	.0500	.0160	-.0070	.0230	-.0260		
105.000				.0770	.0510	-.0670	-.0240	-.0540		
115.000									-.1850	
120.000		-.3650	-.0950	.4370	-.0530	-.1930	-.0430	-.0510	-.1420	
135.000				.1730	-.1230	-.1840	-.1220	-.1540		
150.000		-.2340	-.0100	.1400	-.2590	-.1150	-.0380	-.1510		
165.000		-.2070		.0460	.0110	-.0830	-.0410	-.2490		
180.000		-.2440	-.0510	-.0040						

AMES 11-7X7 OA12 OBA ORBITER FUSELAGE (RBPB24)

MACH (2) = .900 BETA (2) = -4.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1600	.9040	.5000	-.4280	.1110	.1300			.0990		.0490	.0110	.0320	.0960	.1550
20.000	1.1600		.2860	-.3380	.1090	.1330			.1090		.0470				
40.000	1.1600		.3620	-.1720	.1540	.1710			.1390		.0330	-.0450	.0160	.1100	.1890
55.000	1.1600		.3440	-.1500	.1390	.1560			.1190		.0140				
70.000	1.1600		.2550	-.1860	.0590	.1650			.1170		-.0440	-.6130	-.4030	-.0820	-.1040
90.000	1.1600	.7880	.0890	-.2780	.1120	.1860			.1350		-.1300	-.7620	-.3390	-.1130	-.1060
105.000	1.1500														
110.000	1.1500														
120.000	1.1600		-.1250	-.3750	.1070	.2560			.2390		-.4200	-.8990	-.3740	-.1160	-.1140
135.000	1.1600														
142.000	1.1600									-.6770					
150.000	1.1600		-.2550	-.4890	.1500	.4690			.1020		-.8230	-.6150	-.3290	-.0310	-.0590
157.000	1.1600							.4540							
162.000	1.1600								-.0390						
165.000	1.1600										-.8380	-.5010	-.1870	.0260	-.0470
169.000	1.1600								-.2260						
172.000	1.1600						.6780								
180.000	1.1600	.3350	-.4660	-.5400	.0860	.5630			.1170		-1.1440	-.4880	-.2430	-.0630	-.0550

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1810							-.4970		-.1360
40.000	.2280	.2190		.0640	-.0380	-.1890	-.5530			-.1430
70.000		-.3890	-.6760	-.2320	-.0330	-.0500	.0650	-.0370		
90.000		-.3220	-.5390	-.0750	-.0890	-.1120	-.0120	-.0530		
105.000				-.0390	-.0840	-.1030	-.0560	-.0830		
110.000									-.1750	
120.000		-.3080	-.0990	.3040	-.2020	-.3580	-.1690	-.0750	-.1480	
135.000				.2710	-.1000	-.2700	-.1210	-.1440		
150.000		-.1970	-.0130	.0350	-.1740	-.2520	-.1030	-.1690		
165.000		-.1830		.0790	.0040	-.2050	-.1390	-.1820		
180.000		-.1610	-.0480	.0170						

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBPB24)

MACH (2) = .899 BETA (3) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1620	.9090	.0460	-.4110	.1130	.1360			.1000		.0510	.0140	.0430	.0930	.1630
20.000	1.1620		.2280	-.3890	.1100	.1310			.1060		.0440				
40.000	1.1620		.2540	-.3070	.1140	.1440			.1090		-.0240	-.0900	-.0440	.0720	.1660
55.000	1.1620		.1990	-.3560	.0530	.0770			.0420		-.0630				
70.000	1.1620		.0850	-.4200	-.0190	.1040			.0550		-.1240	-.6620	-.3930	-.1120	-.1390
90.000	1.1620	.6710	-.0750	-.4870	.0590	.1290			.0670		-.2130	-.8120	-.2350	-.1020	-.1020
105.000	1.1620														
110.000	1.1620														
120.000	1.1620		-.2540	-.5030	.0840	.2160			.1240		-.5010	-.9380	-.3600	-.0470	-.0600
135.000	1.1620														
142.000	1.1620									-.8330					
150.000	1.1620		-.3240	-.5060	.1030	.4310			.0560		-.8930	-.5590	-.2210	.0080	-.0410
157.000	1.1620							.3890							
162.000	1.1620								-.1090						
165.000	1.1620										-.9780	-.4780	-.1230	.0300	-.0190
169.000	1.1620								-.2110						
172.000	1.1620						.6640								
180.000	1.1620	.3600	-.4610	-.5130	.1000	.5750			.1240		-.7910	-.5770	-.1230	.0090	-.0270

X/LB	.9073	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1830							-.4960		-.1120
40.000	.2070	.2100		.0700	-.0250	-.1850	-.5480			-.1240
70.000		-.4440	-.6800	-.2690	-.1510	-.2110	.0160	-.0660		
90.000		-.3330	-.4660	-.2090	-.2360	-.3720	-.0500	-.0850		
105.000				-.1720	-.2230	-.4250	-.0840	-.1180		
110.000									-.1970	
120.000		-.2470	-.0530	.1390	-.3440	-.5170	-.0750	-.1030	-.1670	
135.000				.2820	-.1970	-.5030	-.1270	-.1530		
150.000		-.1770	-.0190	.1700	-.1020	-.4120	-.1970	-.2110		
165.000		-.1480		.1030	.0440	-.3440	-.2190	-.1790		
180.000		-.1330	-.0270	.0280						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB24)

MACH (2) = .902 BETA (4) = 4.19

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1906	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	1.1570	.8930	.6000	-.4400	.1040	.1250			.1020		.0420	.0190	.0340	.0640	.1550
20.000	1.1570		.1720	-.4270	.0930	.1170			.0990		.0240				
40.000	1.1570		.1340	-.4750	.0540	.0990			.0570		-.1150	-.1620	-.1330	.0150	.1300
55.000	1.1570		.0600	-.5970	-.0290	.0000			-.0230		-.1440				
75.000	1.1570		-.0740	-.6350	-.0850	.0520			.0020		-.2040	-.5990	-.4120	-.1430	-.1540
90.000	1.1570	.5370	-.2270	-.6170	.0380	.0840			.0110		-.2880	-.8330	-.2570	-.1010	-.0920
105.000	1.1570														
110.000	1.1570														
120.000	1.1570		-.3650	-.5810	.0630	.1620			.0120		-.5410	-.8700	-.2290	-.0390	-.0410
135.000	1.1570														
142.000	1.1570									-1.0110					
150.000	1.1570		-.3860	-.5540	.0810	.3790			-.0440		-.6020	-.5670	-.3320	.0130	-.0170
157.000	1.1570							.2860							
162.000	1.1570								-.1980						
165.000	1.1570										-.6310	-.5870	-.3030	.0340	-.0670
169.000	1.1570								-.2140						
172.000	1.1570						.6310								
180.000	1.1570	.3640	-.4610	-.5270	.0820	.5650			.1090		-1.1710	-.4790	-.2720	-.0530	-.0570

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1780							-.4910		-.1490
40.000	.1790	.1910		.0790	-.0150	-.1760	-.5450			-.1360
70.000		-.4100	-.5860	-.3170	-.3060	-.3460	-.0720	-.1040		
90.000		-.3060	-.3800	-.3090	-.3940	-.4690	-.1270	-.1210		
105.000				-.2760	-.4000	-.5070	-.1680	-.1480		
110.000									-.2350	
120.000		-.2090	-.1050	-.1720	-.4940	-.5770	-.1840	-.1350	-.2420	
135.000				.2510	-.1100	-.5980	-.3200	-.1840		
150.000		-.1480	-.0240	.2040	-.0240	-.4810	-.3780	-.2340		
165.000		-.1380		.1180	.0610	-.4090	-.3630	-.1930		
180.000		-.1610	-.0480	.0100						

AMES 11-7X7 OA12 OBA ORBITER FUSELAGE (RBPB24)

MACH (2) = .900 BETA (5) = 8.330

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1210	.8910	.0000	-.4380	.0760	.1130			.0800		.0320	.0210	.0300	.0790	.1420
20.000	1.1210		.1110	-.4440	.0560	.0930			.0780		.0040				
40.000	1.1210		.0230	-.5650	-.0260	.0280			-.0230		-.2340	-.2530	-.2350	-.0490	.0800
55.000	1.1210		-.0320	-.7220	-.1250	-.0640			-.0790		-.2110				
70.000	1.1210		-.2230	-.6760	-.1860	.0160			-.0420		-.2640	-.7110	-.3450	-.1610	-.1690
90.000	1.1210	.4070	-.3630	-.6410	-.1470	.0470			-.0400		-.3170	-.8470	-.2390	-.0970	-.0920
105.000	1.1210														
110.000	1.1210														
125.000	1.1210		-.4670	-.6150	-.0430	.1480			-.0840		-.4770	-.6810	-.2320	-.0340	-.0450
135.000	1.1210														
142.000	1.1210									-.8060					
150.000	1.1210		-.4530	-.6260	.0100	.3030			-.0900		-.7210	-.5860	-.3390	.0030	-.0230
157.000	1.1210							.1510							
162.000	1.1210								-.2990						
165.000	1.1210										-.5830	-.5570	-.3110	.0000	-.0290
169.000	1.1210								-.2420						
172.000	1.1210						.5540								
180.000	1.1210	.3250	-.4630	-.5210	.0330	.5110			.0750		-1.0870	-.5010	-.3520	-.1520	-.1050

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1625							-.4550		-.1520
40.000	.1380	.1610		.0730	-.0120	-.1780	-.5580			-.1570
75.000		-.3830	-.5040	-.3600	-.3090	-.3650	-.0760	-.1120		
90.000		-.3150	-.4010	-.3410	-.4190	-.5190	-.1360	-.1280		
105.000				-.3080	-.4670	-.5290	-.1760	-.1560		
110.000									-.2500	
120.000		-.2060	-.1250	-.1910	-.5790	-.6100	-.2440	-.1510	-.2170	
135.000				.3300	-.0570	-.6300	-.5210	-.1860		
150.000		-.1440	-.0340	.1450	-.1210	-.5270	-.5390	-.2900		
165.000		-.1430		.0830	.0090	-.4910	-.4860	-.1980		
180.000		-.1890	-.0680	-.0060						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB25) (01 MAY 73)

REFERENCE DATA

SREF = 2.421U SQ.FT. XMRP = 28.539U INCHES
LREF = 39.849U INCHES YMRP = .UUUU INCHES
BREF = 39.849U INCHES ZMRP = .UUUU INCHES
SCALE = .U3UU SCALE

PARAMETRIC DATA

ALPHA = 15.UUU RUDDER = .UUU
ELEVON = -10.UUU RUDFLR = .UUU

MACH (1) = .598 BETA (1) = -8.U4U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.UUUU	.U075	.U188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.UUU	.875U	.924U	.UUUU	-.1150	.1460	.1540			.1370		.1110	.1180	.1350	.1510	.1770
20.UUU	.875U		.4000	-.0020	.1560	.1780			.1670		.1320				
40.UUU	.875U		.5090	.1410	.2470	.2320			.2140		.1320	.1140	.1760	.1980	.2440
55.UUU	375U		.4750	.1160	.2010	.1410			.1160		.0330				
75.UUU	.875U		.3440	.0180	.0760	.1320			.0910		-.0430	-.3750	-.2120	-.1570	-.2780
90.UUU	.875U	.7010	.1030	-.1340	.0890	.1010			.0610		-.1300	-.5790	-.2940	-.2540	-.2750
105.UUU	.875U														
110.UUU	.875U														
120.UUU	.875U		-.2330	-.2560	-.0170	.0860			.2000		-.5700	-.5520	-.3630	-.3400	-.3430
135.UUU	.875U														
142.UUU	.875U									-.5470					
150.UUU	.875U		-.4530	-.3740	-.0720	.2510			-.2650		-.9630	-.3020	-.2110	-.1840	-.1910
157.UUU	.875U							.1870							
162.UUU	.875U								-.4510						
165.UUU	.875U										-.5070	-.2480	-.1590	-.1760	-.1890
169.UUU	.875U								-.6980						
172.UUU	.875U						.4040								
180.UUU	.875U	-.1170	-.7070	-.2480	-.1000	.3180			-.2560		-.6510	-.2490	-.3380	-.2660	-.1470

Y/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.UUU	.1790							-.0980		-.1450
40.UUU	.2640	.2290		.0400	-.0680	-.2290	-.1270			-.1450
70.UUU		-.5920	-.4140	-.2510	-.1230	.0290	.0760	.0290		
90.UUU		-.3340	-.1860	-.0500	.0240	.0230	.0190	-.0250		
105.UUU				.1480	.0290	-.0090	-.0180	-.0650		
110.UUU									-.1820	
120.UUU		-.3060	-.0400	.3090	-.0110	-.0990	-.0600	-.0590	-.1190	
135.UUU				-.0330	-.2840	-.3420	-.2370	-.2410		
150.UUU		-.1030	-.0510	-.0790	-.3350	-.1660	-.0990	-.1630		
163.UUU		-.1850		-.0350	-.0390	-.0840	-.0830	-.1870		
180.UUU		-.1460	-.0720	-.0740						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7X7 OA12 OBA ORBITER FUSELAGE (RBPB25)

MACH (1) = .998 BETA (2) = -3.99

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/_B	.0044	.0075	.0188	.0339	.0692	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5122
PH1															
.188	.9224	.9850	.6664	-.1483	.1740	.1740			.1560		.1330	.1320	.1470	.1640	.1920
25.188	.9224		.3910	-.0695	.1800	.1880			.1750		.1360				
45.188	.9224		.4170	.0660	.2460	.2490			.1760		.0590	.0250	.1010	.1630	.2150
55.188	.9224		.3330	-.0150	.0990	.0330			.0690		-.0590				
75.188	.9224		.1680	-.1320	-.0390	.0530			.0120		-.1170	-.4510	-.2670	-.2170	-.5480
90.188	.9224	.5840	-.0820	-.2650	.0680	.0330			-.0010		-.1990	-.6160	-.3360	-.2710	-.2730
105.188	.9224														
115.188	.9224														
120.188	.9224		-.3840	-.3290	-.0390	.0680			.1180		-.5760	-.3130	-.3240	-.2770	-.2570
135.188	.9224														
142.188	.9224									-.3950					
150.188	.9224		-.5090	-.4320	-.0530	.2640			-.3140		-.8730	-.2840	-.1860	-.1550	-.1690
157.188	.9224							.1680							
162.188	.9224								-.5110						
165.188	.9224										-.5030	-.2260	-.1290	-.1190	-.1310
167.188	.9224								-.6950						
172.188	.9224						.4340								
180.188	.9224	-.1030	-.6930	-.2430	-.0590	.3660			-.2340		-.5850	-.1890	-.1590	-.1630	-.1950
X/_B	.5873	.6628	.7380	.7869	.8283	.8948	.9262	.9539	1.0015	1.0392					
PH1															
.188	.1908							-.1160		-.1360					
45.188	.2430	.2250		.0510	-.0520	-.2380	-.1500			-.1390					
75.188		-.3870	-.4390	-.2960	-.1990	-.0750	.0110	-.0310							
90.188		-.3940	-.2740	-.1680	-.1030	-.0620	-.0510	-.0640							
105.188				.1640	-.1050	-.1140	-.0830	-.1030							
115.188									-.1850						
120.188		-.2560	-.0190	.2570	-.1440	-.1660	-.1040	-.1820	-.1410						
135.188				.1370	-.2180	-.2850	-.1910	-.1870							
150.188		-.1830	-.0170	-.1080	-.2270	-.1990	-.1430	-.1730							
165.188		-.1630		.1080	-.1420	-.1720	-.1550	-.1840							
180.188		-.0980	-.0180	-.0110											

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBP825)

MACH (1) = .597 BETA (3) = .0U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.8890	.9790	.0446	-.0850	.1790	.1740			.1 · 0		.1390	.1340	.1510	.1660	.1970
25.000	.8890		.3270	-.0440	.1790	.1740			.1610		.1230				
45.000	.8890		.2920	-.0350	.1350	.1410			.098.		-.0490	-.0870	.0130	.0950	.1640
55.000	.8890		.2040	-.1650	-.0130	-.0670			-.0830		-.1370				
70.000	.8890		-.0210	-.2730	-.1410	-.0690			-.0550		-.1800	-.4970	-.3010	-.2550	-.3770
90.000	.8890	.4550	-.2560	-.3790	-.0480	-.0070			-.0590		-.2410	-.6380	-.3120	-.2590	-.2690
105.000	.8890														
110.000	.8890														
120.000	.8890		-.4670	-.4070	-.0540	.0490			.0220		-.5540	-.4520	-.2630	-.2130	-.2040
135.000	.8890									-.6250					
142.000	.8890								-.3670		-.7720	-.2490	-.1540	-.1280	-.1680
150.000	.8890		-.5520	-.4510	-.0440	.2470									
157.000	.8890							.1110							
162.000	.8890								-.5940						
165.000	.8890										-.5110	-.2060	-.1050	-.0720	-.0930
169.000	.8890								-.6970						
172.000	.8890						.4340								
180.000	.8890	-.0180	-.6660	-.2280	-.0430	.3880			-.2110		-.5580	-.1610	-.1150	-.0730	-.0730

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1970							-.1000		-.1380
45.000	.2120	.2090		.0540	-.0420	-.2470	-.1950			-.1460
70.000		-.5740	-.4480	-.3520	-.1640	-.1120	-.0660	-.0250		
90.000		-.4270	-.3140	-.2870	-.2310	-.1470	-.0910	-.0940		
105.000				-.2070	-.1850	-.1660	-.1230	-.1360		
110.000									-.2120	
120.000		-.2080	-.0170	.0560	-.3000	-.2170	-.1220	-.1080	-.1590	
135.000				.2300	-.1600	-.2630	-.1630	-.1660		
150.000		-.1910	-.0580	.1840	-.1910	-.2660	-.2170	-.2130		
165.000		-.1070		.0640	.1060	-.2150	-.2000	-.1860		
180.000		-.0860	-.0440	-.0020						

AMES 11-7X7 OA12 O2A ORBITER FUSELAGE (RBF825)

MACH (1) = .601 BETA (4) = 4.160

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.8710	.9650	.0000	-.0940	.1660	.1690			.1570		.1270	.1300	.1450	.1610	.1890
20.000	.8710		.2520	-.0760	.1510	.1510			.1400		.1000				
40.000	.8710		.1500	-.1440	.0520	.0460			-.0130		-.2050	-.2320	-.1160	.0180	.1260
55.000	.8710		-.0220	-.3220	-.1230	-.1860			-.1830		-.2190				
70.000	.8710		-.2270	-.4300	-.2320	-.0790			-.1150		-.2330	-.5430	-.3290	-.2930	-.4060
90.000	.8710	.2890	-.4530	-.5120	-.1110	-.0530			-.1070		-.2750	-.6390	-.3080	-.2530	-.2720
105.000	.8710														
110.000	.8710														
120.000	.8710		-.6190	-.5220	-.1830	.0100			-.0780		-.5280	-.4080	-.2160	-.1650	-.1620
135.000	.8710														
142.000	.8710									-.6630					
150.000	.8710		-.6310	-.4840	-.1650	.1970			-.4420		-.6760	-.2180	-.1190	-.0980	-.1150
157.000	.8710							.0690							
162.000	.8710								-.7140						
165.000	.8710										-.5260	-.1890	-.0970	-.0680	-.0850
169.000	.8710								-.7460						
172.000	.8710						.3930								
180.000	.8710	-.0770	-.6820	-.2450	-.0580	.3650			-.2350		-.5840	-.1830	-.1610	-.1450	-.1020

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1930							-.0990		-.1360
40.000	.1730	.1840		.0600	-.0440	-.2430	-.2260			-.1480
70.000		-.5780	-.4620	-.3820	-.2270	-.1330	-.1420	-.1420		
90.000		-.4520	-.3580	-.3980	-.3010	-.1980	-.1150	-.1120		
105.000				-.3340	-.2950	-.2140	-.1590	-.1590		
110.000									-.2340	
120.000		-.2280	-.0830	-.2240	-.4500	-.2750	-.1710	-.1460	-.1830	
135.000				.2220	-.1330	-.3010	-.1960	-.1640		
150.000		-.1390	.0180	.2670	-.1110	-.3230	-.2400	-.2330		
165.000		-.1030		.1220	.0640	-.3210	-.2500	-.1970		
180.000		-.0940	-.0140	-.0020						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB25)

MACH (1) = .6U1 BETA (5) = 0.25U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.8680	.9280	.0000	-.1180	.1370	.1490			.1370		.1100	.1110	.1270	.1410	.1720
20.000	.8680		.1690	-.1270	.0980	.1110			.1020		.0630				
40.000	.8680		.0120	-.2540	-.0560	-.0770			-.1530		-.3810	-.3990	-.2570	-.0870	.0550
55.000	.8680		-.1860	-.4700	-.2340	-.2880			-.2640		-.3140				
70.000	.8680		-.4090	-.5670	-.3190	-.1370			-.1650		-.2750	-.5780	-.3650	-.3230	-.4370
90.000	.8680	.1340	-.6330	-.6440	-.1590	-.0940			-.1550		-.3070	-.6370	-.2920	-.2440	-.2860
105.000	.8680														
110.000	.8680														
120.000	.8680		-.7460	-.6320	-.1150	-.0340			-.1640		-.5190	-.3750	-.1780	-.1450	-.1890
135.000	.8680														
142.000	.8680									-.7290					
150.000	.8680		-.7000	-.5440	-.1040	.1300			-.5210		-.6110	-.2130	-.1090	-.1080	-.1080
157.000	.8680							-.1170							
162.000	.8680								-.8580						
165.000	.8680										-.5340	-.1850	-.1060	-.0900	-.1130
169.000	.8680								-.7970						
172.000	.8680						.3050								
180.000	.8680	-.1000	-.7130	-.2860	-.1040	.3030			-.2950		-.6450	-.2400	-.3210	-.2890	-.1600

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1730							-.1060		-.1430
40.000	.1210	.1450		.0490	-.0420	-.2500	-.2680			-.1630
70.000		-.5730	-.4680	-.4110	-.2530	-.1500	-.0500	-.0450		
90.000		-.4880	-.4320	-.4570	-.3430	-.2120	-.1390	-.1230		
105.000				-.4420	-.3500	-.2450	-.1840	-.1740		
110.000									-.2370	
120.000		-.3100	-.1290	-.2670	-.6490	-.3440	-.2070	-.1760	-.2070	
135.000				.3520	-.1770	-.3770	-.2580	-.2140		
150.000		-.1510	-.0210	.1620	-.2150	-.4370	-.3450	-.2970		
165.000		-.1500		.0750	-.0170	-.4530	-.3700	-.2080		
180.000		-.1460	-.0720	-.0750						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB25)

MACH (2) = .902 BETA (1) = -8.13U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0740	.9910	.6000	-.1370	.1830	.2000			.1800		.1340	.1120	.1190	.1600	.2280
20.000	1.0740		.5000	-.0210	.2100	.2230			.2050		.1480				
40.000	1.0740		.5970	.1430	.2850	.2830			.2620		.1600	.1010	.1410	.2080	.2940
55.000	1.0740		.5700	.1220	.2450	.2170			.2660		.1110				
70.000	1.0740		.4440	.0210	.1110	.2160			.1960		.0500	-.5260	-.3530	-.1280	-.1880
90.000	1.0740	.8440	.2120	-.1660	.1260	.2020			.1990		-.0400	-.7090	-.5030	-.2120	-.1650
105.000	1.0740														
110.000	1.0740														
125.000	1.0740		-.1360	-.3550	.0450	.2260			.3780		-.4120	-.9140	-.5300	-.2710	-.2420
135.000	1.0740														
142.000	1.0740									-.5160					
150.000	1.0740		-.3450	-.6420	.0060	.4320			.0700		-.9180	-.6210	-.4490	-.1270	-.1230
157.000	1.0740							.4430							
162.000	1.0740								-.0500						
165.000	1.0740										-.6380	-.5260	-.2370	-.0820	-.1340
169.000	1.0740								-.3180						
172.000	1.0740						.6180								
180.000	1.0740	.7220	-.6280	-.6870	-.0020	.4860			.0170		-1.0490	-.6190	-.3700	-.0840	-.0890

X/LB	.5873	.6628	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2520							-.4290		-.1780
40.000	.3370	.3230		.1450	.0300	-.1370	-.5080			-.1600
70.000		-.5950	-.8750	-.4940	-.2420	-.5020	-.1670	-.1650		
90.000		-.3860	-.5700	-.0490	-.2730	-.3710	-.2050	-.1410		
105.000				.1650	-.1690	-.3490	-.3460	-.1390		
110.000									-.2210	
120.000		-.4430	-.1070	.4770	-.0860	-.4010	-.4680	-.0590	-.1510	
135.000				.0650	-.2330	-.7840	-.1850	-.1690		
150.000		-.2830	-.0530	-.0280	-.3350	-.3590	-.1380	-.1750		
165.000		-.2640		.0040	-.0580	-.2820	-.1570	-.2210		
180.000		-.2220	-.0910	-.0510						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB25)

MACH (2) = .901 BETA (2) = -4.020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0790	1.0440	.0000	-.1160	.2080	.2190			.2030		.1450	.1220	.1320	.1720	.2400
25.000	1.0790		.4690	-.0430	.2270	.2280			.2170		.1490				
40.000	1.0790		.5000	.0400	.2420	.2570			.2290		.0960	.0410	.0810	.1640	.2660
55.000	1.0790		.4360	-.0420	.1490	.1130			.1080		.0300				
70.000	1.0790		.2840	-.1580	.0000	.1470			.1250		-.0280	-.5920	-.4360	-.1710	-.2480
90.000	1.0790	.7310	.0470	-.3600	.0620	.1530			.1400		-.1180	-.7640	-.6070	-.2220	-.1600
105.000	1.0790														
110.000	1.0790														
120.000	1.0790		-.2640	-.5230	.0360	.2170			.2880		-.4740	-.9510	-.4110	-.1910	-.1590
135.000	1.0790														
142.000	1.0790									-.6580					
150.000	1.0790		-.4200	-.6250	.0560	.4350			.0540		-.9150	-.5600	-.4210	-.1190	-.0970
157.000	1.0790							.4260							
162.000	1.0790								-.0850						
165.000	1.0790										-.8360	-.3870	-.2530	.0020	-.0970
165.000	1.0790								-.2910						
172.000	1.0790						.6320								
180.000	1.0790	.1900	-.6420	-.6380	.0640	.5100			.0450		-1.0770	-.5210	-.2510	-.0500	-.0510

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2660							-.4360		-.1910
40.000	.3150	.3200		.1630	.0490	-.1250	-.5000			-.1860
70.000		-.6150	-.8770	-.3990	-.5200	-.5490	-.1520	-.1940		
90.000		-.4230	-.5860	-.2180	-.4280	-.3230	-.4690	-.1510		
105.000				-.0130	-.3120	-.4320	-.5250	-.1520		
110.000									-.2260	
120.000		-.3630	-.0580	.3590	-.2130	-.5450	-.4770	-.0650	-.1700	
135.000				.2340	-.1790	-.7020	-.3400	-.1360		
150.000		-.2460	-.0360	.0080	-.2140	-.4920	-.2500	-.1830		
165.000		-.2370		.0370	-.0640	-.4090	-.2680	-.2010		
180.000		-.2020	-.0900	-.0420						

AMES 11-7X7 OA12 OBA ORBITER FUSELAGE (RBPB25)

MACH (2) = .902 BETA (3) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0950	1.0280	.0000	-.1180	.2110	.2250			.2020		.1510	.1280	.1370	.1740	.2470
20.000	1.0950		.4160	-.0790	.2140	.2230			.2080		.1410				
40.000	1.0950		.3920	-.0690	.1780	.2080			.1680		.0680	-.0420	-.0040	.1080	.2340
55.000	1.0950		.2910	-.2050	.0390	.0230			.0250		-.0540				
75.000	1.0950		.1230	-.3480	-.0910	.0960			.0640		-.0940	-.6390	-.5270	-.2390	-.3060
90.000	1.0950	.6280	-.1050	-.5490	.0190	.1130			.0910		-.1930	-.8040	-.5530	-.1920	-.1640
105.000	1.0950														
110.000	1.0950														
120.000	1.0950		-.3670	-.5930	.0520	.2010			.2020		-.5480	-.7950	-.4090	-.0920	-.0840
135.000	1.0950														
142.000	1.0950									-.7770					
150.000	1.0950		-.4760	-.5890	.0060	.4010			.0180		-.9350	-.4950	-.3720	-.0440	-.1070
157.000	1.0950							.3540							
162.000	1.0950								-.1420						
165.000	1.0950										-.9280	-.4570	-.2030	.0300	-.0350
169.000	1.0950								-.2530						
172.000	1.0950						.5680								
180.000	1.0950	.2070	-.6440	-.5940	.0870	.5030			.0600		-.8220	-.5600	-.1520	.0460	-.0210

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2760							-.4300		-.2560
40.000	.2880	.3080		.1700	.0670	-.1140	-.4890			-.2090
70.000		-.5730	-.8110	-.4180	-.4110	-.5390	-.1960	-.1990		
90.000		-.4410	-.5910	-.3810	-.5130	-.5460	-.5030	-.1760		
105.000				-.2290	-.3940	-.5450	-.5320	-.1740		
110.000									-.2430	
120.000		-.2760	-.0910	.0930	-.3290	-.6120	-.4940	-.1060	-.2010	
135.000				.2420	-.1460	-.5980	-.4350	-.1760		
150.000		-.2300	-.0660	.1540	-.1320	-.5370	-.4570	-.2700		
165.000		-.1980		.0700	.0350	-.4480	-.3920	-.1960		
180.000		-.1620	-.0520	-.1070						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB25)

MACH (2) = .898 BETA (4) = 4.19U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0960	1.0120	.0000	-.1350	.2020	.2140			.1930		.1450	.1190	.1280	.1700	.2410
20.000	1.0960		.3530	-.1250	.1830	.2000			.1850		.1200				
40.000	1.0960		.2670	-.1960	.0620	.1190			.0710		-.1260	-.1600	-.1150	.0240	.1820
55.000	1.0960		.1390	-.4140	-.0870	-.0780			-.0600		-.1380				
75.000	1.0960		-.0510	-.5700	-.1750	.0320			.0460		-.1670	-.6890	-.6000	-.2100	-.3230
90.000	1.0960	.4920	-.2640	-.6590	-.0190	.0730			.0300		-.2510	-.8500	-.4200	-.1580	-.1560
105.000	1.0960														
110.000	1.0960														
120.000	1.0960		-.4770	-.6270	.0470	.1710			.0670		-.5860	-.9450	-.3010	-.0890	-.0910
135.000	1.0960														
142.000	1.0960									-.9000					
150.000	1.0960		-.5470	-.5970	.0460	.3470			-.0380		-.6170	-.5670	-.2710	-.0150	-.0510
157.000	1.0960							.2590							
162.000	1.0960								-.2360						
165.000	1.0960										-.5950	-.6070	-.2570	.0300	-.0240
169.000	1.0960								-.2740						
172.000	1.0960						.5630								
180.000	1.0960	.1990	-.6520	-.6180	.0570	.5150			.0320		-1.0540	-.5050	-.2780	-.0460	-.0540

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2650							-.4360		-.1810
40.000	.2430	.2730		.1640	.0660	-.1180	-.5030			-.1760
70.000		-.5450	-.6830	-.4490	-.4090	-.6420	-.2060	-.1720		
90.000		-.4410	-.5470	-.4870	-.5910	-.6170	-.4060	-.1630		
105.000				-.3610	-.5070	-.5960	-.5200	-.1960		
110.000									-.2710	
120.000		-.2600	-.1610	-.2340	-.5080	-.6850	-.5710	-.1580	-.2260	
135.000				.1990	-.1330	-.6210	-.5620	-.2740		
150.000		-.1980	-.0800	.2270	-.0310	-.5130	-.5110	-.2750		
165.000		-.1690		.1150	.0540	-.4190	-.4230	-.2030		
180.000		-.1930	-.0850	-.0350						

AMES 11-7X7 OA12 02A ORBITER FUSELAGE (RBFB25)

MACH (2) = .899 BETA (5) = 8.330

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	1.0770	.9840	.0440	-.1350	.1860	.1950			.1800		.1370	.1140	.1220	.1530	.2290
20.000	1.0770		.2950	-.1720	.1440	.1640			.1540		.0950				
40.000	1.0770		.1580	-.3130	-.0110	.0180			-.0490		-.2810	-.3010	-.2240	-.0740	.1230
55.000	1.0770		.0090	-.5810	-.2110	-.1590			-.1290		-.2110				
70.000	1.0770		-.1950	-.6720	-.2930	-.1040			-.0380		-.2170	-.7110	-.6440	-.3060	-.3510
90.000	1.0770	.3710	-.3930	-.6890	-.1770	.0560			-.0690		-.2850	-.8560	-.3880	-.1610	-.1770
105.000	1.0770														
110.000	1.0770														
120.000	1.0770		-.5820	-.5890	-.1630	.1280			-.0150		-.5200	-.8390	-.2780	-.0590	-.1030
135.000	1.0770									-.8380					
142.000	1.0770														
150.000	1.0770		-.6240	-.6450	-.0150	.3140			-.0970		-.6980	-.5810	-.3520	-.0650	-.0430
157.000	1.0770							.1770							
162.000	1.0770								-.3240						
165.000	1.0770										-.5610	-.5980	-.3310	.0170	-.0350
169.000	1.0770								-.2980						
172.000	1.0770						.5270								
180.000	1.0770	.1810	-.6540	-.6710	-.0660	.4730			.0430		-1.0170	-.5270	.4020	-.0840	-.0920

X/LB	.5873	.6628	.736	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2500							-.4310		-.1580
40.000	.1890	.2300		.1540	.0670	-.1180	-.5080			-.1650
70.000		-.5160	-.5790	-.4300	-.4480	-.7040	-.2160	-.1810		
90.000		-.4640	-.5480	-.4700	-.6500	-.6620	-.5370	-.1530		
105.000				-.3780	-.5700	-.6410	-.5940	-.2140		
110.000									-.2910	
120.000		-.2860	-.1750	-.2340	-.5620	-.8100	-.6640	-.1620	-.2230	
135.000				.3590	-.0600	-.6640	-.6020	-.4470		
150.000		-.1780	-.0400	.1460	-.1260	-.5500	-.5330	-.4020		
165.000		-.1730		.0660	.0000	-.4900	-.4700	-.2360		
180.000		-.2040	-.0760	-.0350						

AMES 11-7ft OA12 OBA ORBITER FUSELAGE (RBPB26) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 20.000 RUDDER = .000
ELEVON = -10.000 RUDFLR = .000

MACH (1) = .597 BETA (1) = -7.980

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.7610	.9650	.0000	.1090	.2610	.2520			.2380		.2160	.2130	.2290	.2480	.2750
20.000	.7610		.6130	.2150	.2960	.2900			.2760		.2410				
40.000	.7610		.6540	.3030	.3520	.3270			.2990		.1810	.1330	.2170	.2820	.3410
55.000	.7610		.6310	.1860	.1840	.0630			.0420		-.0160				
70.000	.7610		.3270	.0000	-.0390	.0830			.0480		-.0880	-.4340	-.3130	-.2620	-.5840
90.000	.7610	.5930	.0020	-.2250	-.0170	.0200			.0030		-.1990	-.7080	-.4490	-.3920	-.3370
105.000	.7610														
110.000	.7610														
120.000	.7610		-.4400	-.4110	-.1530	-.0140			.1870		-.7560	-.6900	-.5090	-.4780	-.4430
135.000	.7610														
142.000	.7610									-.6230					
150.000	.7610		-.6790	-.5490	-.1680	.1860			-.3600		-1.1060	-.3530	-.2680	-.2510	-.2600
157.000	.7610							.1080							
162.000	.7610								-.5510						
165.000	.7610										-.5700	-.2770	-.1560	-.2380	-.2620
169.000	.7610								-.8110						
172.000	.7610						.3360								
180.000	.7610	-.2720	-.9120	-.3380	-.1440	.2720			-.3520		-.6340	-.2440	-.4080	-.1680	-.1370

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2770							-.0570		-.1160
40.000	.3680	.3490		.1470	.0360	-.1580	-.0910			-.1360
70.000		-.8770	-.6890	-.5250	-.2900	-.1880	-.0650	-.0500		
90.000		-.5980	-.5270	-.4620	-.3220	-.2330	-.1550	-.1390		
105.000				-.0520	-.2160	-.2140	-.1570	-.1680		
110.000									-.2360	
120.000		-.3520	-.0700	.3080	-.1170	-.1940	-.1000	-.0730	-.1250	
135.000				-.0480	-.3510	-.4030	-.2770	-.2610		
150.000		-.2210	-.0830	-.0780	-.3620	-.2180	-.1480	-.2050		
165.000		-.2400		-.0660	-.0900	-.1790	-.1500	-.2370		
180.000		-.1870	-.1290	-.1330						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 OEA ORBITER FUSELAGE (RBPE26)

MACH (1) = .598 BETA (2) = -3.96U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.7600	.9320	.0000	.1300	.2980	.2730			.2570		.2280	.2340	.2440	.2640	.2920
25.000	.7600		.5880	.2140	.3040	.2930			.2770		.2360				
40.000	.7600		.5550	.2180	.2770	.2620			.2120		.0490	.0630	.1170	.2110	.2980
55.000	.7600		.5010	.0310	.0590	-.0760			-.0730		-.1160				
70.000	.7600		.1510	-.1680	-.1510	-.0640			-.0260		-.1660	-.5110	-.3760	-.3220	-.6610
90.000	.7600	.4890	-.1690	-.3670	-.0870	-.0380			-.0570		-.2560	-.7440	-.4680	-.3960	-.3560
105.000	.7600														
110.000	.7600														
120.000	.7600		-.5600	-.4770	-.1460	-.0140			.1220		-.7410	-.6260	-.4390	-.3820	-.3490
135.000	.7600									-.6700					
142.000	.7600								-.3940		-.9830	-.3180	-.2520	-.2250	-.2440
150.000	.7600		-.7140	-.5900	-.1210	.2120		.1090							
157.000	.7600								-.5990						
162.000	.7600										-.5160	-.2450	-.1280	-.1460	-.2150
165.000	.7600								-.8060						
169.000	.7600						.3730								
172.000	.7600								-.3270		-.5480	-.1800	-.1560	-.1430	-.0870
180.000	.7600	-.3030	-.8840	-.3260	-.1050	.3200									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2960							-.0590		-.1160
40.000	.3420	.3350		.1570	.0480	-.1610	-.1180			-.1390
70.000		-.6820	-.6880	-.5010	-.2950	-.1630	-.0420	-.0330		
90.000		-.6950	-.6290	-.5820	-.4240	-.2370	-.1660	-.1400		
105.000				-.2370	-.3250	-.2320	-.1880	-.1730		
110.000									-.2590	
120.000		-.3000	-.0610	.1300	-.2920	-.2450	-.1450	-.1110	-.1680	
135.000				.1390	-.2570	-.3350	-.2210	-.2170		
150.000		-.2210	-.0600	.0280	-.2610	-.2500	-.1810	-.2220		
165.000		-.2300		-.0470	-.0480	-.2570	-.2290	-.2430		
180.000		-.1210	-.0480	-.0430						

AMES 11-7X7 OA12 O2A ORBITER FUSELAGE (RBF326)

MACH (1) = .600 BETA (3) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.7890	.9440	.6000	.1240	.2940	.2760			.2570		.2310	.2370	.2520	.2670	.2940
20.000	.7890		.5230	.1590	.2890	.2690			.2560		.2140				
40.000	.7890		.4290	.1020	.1870	.1610			.0980		-.1100	-.1530	-.0120	.1210	.2440
55.000	.7890		.4110	-.1290	-.0640	-.2040			-.1810		-.2170				
70.000	.7890		-.0270	-.3220	-.2640	-.0700			-.0990		-.2280	-.5710	-.4130	-.3690	-.6940
90.000	.7890	.3550	-.3500	-.4710	-.1380	-.0770			-.1070		-.3010	-.7650	-.4560	-.3890	-.3670
105.000	.7890														
110.000	.7890														
120.000	.7890		-.6540	-.5530	-.1400	-.0120			.0420		-.6980	-.5530	-.3590	-.2970	-.2660
135.000	.7890									-.6860					
142.000	.7890														
150.000	.7890		-.7520	-.5390	-.1000	.2120			-.4320		-.8590	-.2750	-.2070	-.2340	-.3180
157.000	.7890							.0760							
162.000	.7890								-.6660						
165.000	.7890										-.5100	-.2200	-.1060	-.0770	-.1130
169.000	.7890								-.8110						
172.000	.7890						.3730								
180.000	.7890	-.1950	-.8740	-.3190	-.0920	.3380			-.3070		-.5340	-.1530	-.1100	-.0780	-.0880

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3010							-.0650		-.1280
20.000	.2980	.3040		.1520	.0450	-.1750	-.1540			-.1480
70.000		-.8360	-.6620	-.4970	-.3110	-.1570	-.0440	-.0350		
90.000		-.7340	-.6730	-.6850	-.4780	-.2730	-.1690	-.1350		
105.000				-.4690	-.4000	-.2800	-.2060	-.2030		
110.000									-.2960	
120.000		-.2800	-.1060	-.1290	-.4920	-.3110	-.2020	-.1650	-.2140	
135.000				.2380	- 2110	-.3120	-.2000	-.2000		
150.000		-.2720	-.0920	.1800	-.2690	-.3400	-.2730	-.2800		
165.000		-.1670		.0270	.0610	-.2680	-.2510	-.2540		
180.000		-.1290	-.0440	-.0540						

AMES 11-7x7 OA12 OBA ORBITER FUSELAGE (RBPB26)

MACH (1) = .598 BETA (4) = 4.190

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.7980	.8710	.0000	.1130	.2850	.2690			.2510		.2250	.2270	.2410	.2590	.2910
20.000	.7980		.4450	.1120	.2570	.2350			.2240		.1880				
40.000	.7980		.2770	-.0240	.0740	.0240			-.0620		-.3110	-.3540	-.1680	.0200	.1790
55.000	.7980		.2110	-.2870	-.2110	-.3440			-.3010		-.3270				
70.000	.7980		-.2370	-.4770	-.3590	-.1410			-.1620		-.2830	-.6160	-.4510	-.4220	-.7250
90.000	.7980	.2050	-.5380	-.5790	-.1880	-.1130			-.1460		-.3330	-.7560	-.4310	-.3670	-.3680
105.000	.7980														
110.000	.7980														
125.000	.7980		-.7810	-.6450	-.1360	-.0190			-.0440		-.6520	-.4730	-.2820	-.2250	-.2230
135.000	.7980														
142.000	.7980									-.2980					
150.000	.7980		-.7960	-.4460	-.1010	.1840			-.4850		-.7490	-.2410	-.1440	-.1410	-.2010
157.000	.7980							.0020							
162.000	.7980								-.7630						
165.000	.7980										-.5110	-.2060	-.0920	-.0720	-.0990
169.000	.7980								-.8390						
172.000	.7980						.3350								
180.000	.7980	-.2120	-.8790	-.3310	-.1030	.3180			-.3330		-.5490	-.1670	-.1670	-.1450	-.1980

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2880							-.0580		-.1180
40.000	.2420	.2680		.1480	.0530	-.1750	-.1800			-.1410
70.000		-.7850	-.6140	-.5320	-.3180	-.1680	-.0150	-.0250		
90.000		-.7570	-.6900	-.7310	-.5160	-.2940	-.1380	-.1240		
105.000				-.6200	-.4650	-.2950	-.2020	-.1890		
110.000									-.2930	
125.000		-.3220	-.1710	-.5170	-.6930	-.3750	-.2230	-.1960	-.2390	
135.000				.0920	-.1400	-.3390	-.2330	-.2150		
150.000		-.1910	-.0230	.3090	-.1040	-.3400	-.2720	-.2700		
165.000		-.1340		.1240	.0710	-.3160	-.2830	-.2530		
180.000		-.1180	-.0410	-.0490						

AMES 11-7ft OA12 02A ORBITER FUSELAGE (RBPB26)

MACH (1) = .599 BETA (5) = 8.300

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.7260	.8270	.6000	.1060	.2640	.2510			.2490		.2050	.2080	.2230	.2410	.2730
20.000	.7260		.3690	.0580	.2090	.1960			.1840		.1490				
40.000	.7260		.1350	-.1430	-.0420	-.1410			-.2460		-.5320	-.5590	-.3400	-.0930	.1120
55.000	.7260		.0410	-.4560	-.3350	-.4740			-.4020		-.4580				
70.000	.7260		-.4160	-.6180	-.4480	-.2660			-.2140		-.3330	-.6580	-.4950	-.4660	-.7350
90.000	.7260	.0540	-.7080	-.7070	-.2330	-.1450			-.1770		-.3540	-.7490	-.4090	-.3550	-.4150
105.000	.7260														
110.000	.7260														
120.000	.7260		-.8970	-.7580	-.1470	-.0460			-.1160		-.6150	-.4280	-.2310	-.2160	-.2460
135.000	.7260														
142.000	.7260									-.7160					
150.000	.7260		-.8670	-.4190	-.1230	.1380			-.5530		-.6660	-.2260	-.1140	-.0980	-.1250
157.000	.7260							-.0960							
162.000	.7260								-.9110						
165.000	.7260										-.5350	-.1940	-.0930	-.0840	-.1240
169.000	.7260								-.8880						
172.000	.7260						.2630								
180.000	.7260	-.3250	-.9090	-.3580	-.1370	.2680			-.3830		-.6120	-.2260	-.4080	-.1820	-.1510

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2760							-.0570		-.1240
40.000	.1810	.2300		.1480	.0520	-.1630	-.2040			-.1400
70.000		-.7660	-.6240	-.5390	-.3510	-.1840	-.0340	-.0190		
90.000		-.8100	-.6960	-.8030	-.5720	-.2880	-.1640	-.1260		
105.000				-.7970	-.5120	-.3130	-.2160	-.2010		
110.000									-.2870	
120.000		-.4510	-.3080	-.5040	-.9060	-.4530	-.2830	-.2360	-.2660	
135.000				.3710	-.1650	-.3980	-.2780	-.2420		
150.000		-.1870	-.0550	.1320	-.2370	-.4360	-.3510	-.3170		
165.000		-.1930		.0380	-.0150	-.4360	-.3670	-.2670		
180.000		-.1930	-.1110	-.1310						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7X7 OA12 O2A ORBITER FUSELAGE (RBPB26)

MACH (2) = .903 BETA (1) = -8.070

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3255	.3953	.5121
PHI															
.000	.9745	1.0680	.8000	.1210	.3190	.3100			.2920		.2530	.2340	.2430	.2680	.3280
20.000	.9745		.6980	.2390	.3430	.3420			.3270		.2750				
40.000	.9745		.7420	.3400	.4030	.3910			.3650		.2480	.1970	.2410	.2970	.3910
55.000	.9745		.6570	.2380	.2480	.1580			.1650		.1190				
70.000	.9745		.4630	.0540	.0170	.1810			.1810		.0680	-.4550	-.3480	-.3060	-.4450
90.000	.9745	.7680	.1640	-.2180	.0370	.1360			.1700		-.0350	-.6940	-.5870	-.4620	-.1960
105.000	.9745														
110.000	.9745														
125.000	.9745		-.2820	-.5120	-.0920	.1370			.4050		-.6170	-1.0000	-.7990	-.2670	-.0840
135.000	.9745									-.5170					
142.000	.9745														
150.000	.9745		-.5260	-.7030	-.1080	.3820			.0110		-1.0730	-.7390	-.5150	-.2520	-.1780
157.000	.9745							.3940							
162.000	.9745								-.1950						
165.000	.9745										-.6480	-.5330	-.3260	-.1350	-.2160
169.000	.9745								-.3760						
172.000	.9745						.5550								
180.000	.9745	-.0240	-.7890	-.6460	-.1050	.4240			-.0590		-1.1460	.6910	-.3170	-.1560	-.0780

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3480							-.3320		-.1750
40.000	.4380	.4350		.2470	.1270	-.0750	-.4280			-.1930
70.000		-.8410	-1.0420	-.6490	-.7350	-.6630	-.4400	-.3710		
90.000		-.5460	-.8830	-.5100	-.7640	-.5510	-.4120	-.3520		
105.000				-.0380	-.5610	-.4620	-.4250	-.3590		
110.000									-.3540	
125.000		-.4540	-.1460	.4140	-.2090	-.5050	-.3680	-.1910	-.2350	
135.000				.0120	-.3290	-.9140	-.3860	-.2710		
150.000		-.2980	-.0970	-.0690	-.3530	-.6250	-.2460	-.2360		
165.000		-.2890		-.0270	-.1050	-.5170	-.2970	-.2820		
180.000		-.3020	-.1630	-.0840						

AMES 11-7ft OA12 02A ORBITER FUSELAGE (RBFB26)

MACH (2) = .901 BETA (2) = -3.99

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.9910	1.1180	.0000	.1440	.3440	.3320			.3130		.2730	.2460	.2520	.2810	.3430
25.000	.9910		.6680	.2210	.3530	.3440			.3300		.2760				
40.000	.9910		.6460	.2400	.3310	.3300			.2950		.1470	.0880	.1520	.2390	.3560
55.000	.9910		.5360	.0790	.1180	.0280			.0540		.0270				
70.000	.9910		.3030	-.1230	-.1140	.1040			.1580		-.0640	-.5570	-.4290	-.4280	-.5880
90.000	.9910	.6590	-.0650	-.4140	-.0360	.0880			.1190		-.1110	-.7670	-.6610	-.2190	-.2350
105.000	.9910														
110.000	.9910														
120.000	.9910		-.4080	-.6310	-.0850	.1540			.3250		-.6680	-.9900	-.4450	-.1680	-.1490
135.000	.9910														
142.000	.9910									-.6270					
150.000	.9910		-.5940	-.6390	-.0640	.4010			.4080		-1.0750	-.6210	-.4990	-.2880	-.1640
157.000	.9910							.4060							
162.000	.9910								-.1200						
165.000	.9910										-.8660	-.4550	-.3890	-.0550	-.1620
169.000	.9910								-.3490						
172.000	.9910						.5650								
180.000	.9910	-.0070	-.6730	-.5380	-.1530	.4340			-.0150		-.9690	-.5520	-.2430	-.0210	-.1670

X/LB	.5873	.6626	.7580	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3650							-.3360		-.2050
40.000	.4090	.4250		.2630	.1490	-.0620	-.4240			-.2260
70.000		-.8130	-.9770	-.5990	-.5740	-.6010	-.4210	-.3680		
90.000		-.6690	-.8930	-.6620	-.8500	-.3990	-.4640	-.3730		
105.000				-.2330	-.5700	-.5750	-.4970	-.3850		
110.000									-.3650	
120.000		-.3460	-.0760	.3070	-.2950	-.6980	-.3270	-.2370	-.2750	
135.000				.2160	-.2450	-.7840	-.3930	-.2360		
150.000		-.2700	-.0620	.0090	-.2280	-.6570	-.3240	-.2540		
165.000		-.3000		.0130	-.0830	-.6020	-.3970	-.2800		
180.000		-.2770	-.1350	-.0660						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 OBA ORBITER FUSELAGE (RBFB26)

MACH (2) = .899 BETA (3) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1906	.1581	.1732	.1958	.2259	.2711	.3220	.3953	.5125
PHI															
.000	1.0070	1.1190	.0000	.1350	.3460	.3320			.3690		.2720	.2640	.2760	.2870	.3480
20.000	1.0070		.6180	.1730	.3410	.3240			.3110		.2620				
40.000	1.0070		.5330	.1270	.2450	.2390			.1910		.0060	-.0280	.0560	.1570	.3180
55.000	1.0070		.4260	-.0940	-.0290	-.0910			-.0470		-.1660				
75.000	1.0070		.1350	-.2890	-.2270	.0440			.0470		-.0710	-.6220	-.5240	-.3340	-.2060
90.000	1.0070	.5530	-.1550	-.5840	-.0810	.0610			.0760		-.1760	-.8190	-.7430	-.2280	-.2670
105.000	1.0070														
110.000	1.0070														
120.000	1.0070		-.5020	-.6760	-.0560	.1560			.2470		-.6710	-.9820	-.4770	-.1560	-.1240
135.000	1.0070									-.7420					
142.000	1.0070								-.0190		-1.0250	-.6140	-.4720	-.1420	-.2450
150.000	1.0070		-.6460	-.5620	-.0940	.3560		.3240							
157.000	1.0070								-.1550						
162.000	1.0070										-.8640	-.4670	-.2310	.0370	-.0710
165.000	1.0070								-.2830						
169.000	1.0070						.4320								
172.000	1.0070								-.0110		-.8210	-.5310	-.1580	.0190	-.0350
180.000	1.0070	.0080	-.6020	-.4850	-.1410	.3800									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3730							-.3360		-.2080
40.000	.3690	.4000		.2640	.1590	-.0540	-.4220			-.2210
75.000		-.7500	-.9350	-.6060	-.4960	-.4650	-.4180	-.3770		
90.000		-.6880	-.9050	-.8180	-.9280	-.3330	-.4540	-.4660		
105.000				-.4010	-.6090	-.5950	-.4650	-.4110		
110.000									-.3830	
120.000		-.2830	-.1740	.0160	-.3820	-.7920	-.2800	-.2990	-.3210	
135.000				.2360	-.1970	-.6590	-.3310	-.2220		
150.000		-.2780	-.1050	.1470	-.1610	-.6350	-.4680	-.3110		
165.000		-.2700		.0300	.0190	-.5400	-.4380	-.2610		
180.000		-.2220	-.1030	-.0570						

AMES 11-7U7 OA12 OBA ORBITER FUSELAGE (RBPB26)

MACH (2) = .898 BETA (4) = 4.23U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1906	.1501	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.9960	1.0870	.0000	.1310	.3340	.3210			.3020		.2650	.2520	.2560	.2790	.3390
20.000	.9960		.5490	.1290	.3020	.2940			.2810		.2330				
40.000	.9960		.4060	.0020	.1370	.1160			.0520		-.1810	-.1960	-.0760	.0610	.2410
55.000	.9960		.2750	-.2710	-.1960	-.2250			-.1530		-.1650				
70.000	.9960		-.0250	-.4750	-.3050	-.0140			-.0110		-.1370	-.6760	-.6160	-.3270	-.6940
90.000	.9960	.4430	-.2990	-.6840	-.1420	.0340			.0290		-.2360	-.8550	-.7360	-.1860	-.2840
105.000	.9960														
110.000	.9960														
125.000	.9960		-.6020	-.6410	-.1210	.1530			.1280		-.6540	-.9390	-.4540	-.1690	-.1440
135.000	.9960														
142.000	.9960									-.7660					
150.000	.9960		-.6950	-.5260	-.1290	.2870			-.0830		-.9980	-.5660	-.2680	.0020	-.1160
157.000	.9960							.2000							
162.000	.9960								-.2750						
165.000	.9960										-.9840	-.4720	-.1280	.0270	-.0450
169.000	.9960								-.3060						
172.000	.9960						.4470								
180.000	.9950	.0230	-.6660	-.5510	-.0770	.4290			-.0340		-.9370	-.5170	-.2580	-.0350	-.0740

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3620							-.3420		-.1930
40.000	.3140	.3590		.2540	.1570	-.0540	-.4350			-.2290
70.000		-.6990	-.8650	-.6420	-.4720	-.3850	-.3710	-.3470		
90.000		-.7000	-.8690	-.8900	-.9960	-.3380	-.4750	-.4170		
105.000				-.5720	-.7440	-.3860	-.4720	-.4430		
110.000									-.3850	
125.000		-.3340	-.2200	-.2930	-.5480	-.7780	-.3340	-.4010	-.3660	
135.000				.1230	-.1960	-.6140	-.3060	-.3100		
150.000		-.3080	-.1700	.2810	-.1140	-.5530	-.4310	-.3560		
165.000		-.2310		.1190	.1150	-.3410	-.3250	-.2790		
180.000		-.2570	-.1220	-.0620						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 OEA ORBITER FUSELAGE (RBPB26)

MACH (2) = .904 BETA (5) = 8.360

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3234	.3953	.5172
PHI															
.000	.9780	1.0830	.4000	.1200	.3240	.3030			.2980		.2510	.2230	.2320	.2660	.3750
20.000	.9780		.4850	.0840	.2590	.2610			.2500		.2010				
40.000	.9780		.2960	-.0960	.0180	-.0240			-.0980		-.3870	-.4110	-.2200	-.0470	.1750
55.000	.9780		.1050	-.4120	-.3060	-.3510			-.2390		-.3020				
70.000	.9780		-.1680	-.6360	-.4710	-.0640			-.0570		-.1970	-.6990	-.7050	-.3970	-.6450
90.000	.9780	.3110	-.4280	-.6970	-.2720	.0280			-.0490		-.2710	-.8760	-.7780	-.1790	-.3260
105.000	.9780														
110.000	.9780														
120.000	.9780		-.6850	-.5580	-.2740	.1240			.0180		-.5960	-1.1020	-.3780	-.1890	-.1870
135.000	.9780									-.8690					
142.000	.9780														
150.000	.9780		-.7340	-.5620	-.1750	.2700			-.1110		-.6740	-.6120	-.2870	-.0160	-.0680
157.000	.9780							.1680							
162.000	.9780								-.3460						
165.000	.9780										-.6430	-.6290	-.2680	.0220	-.0390
169.000	.9780								-.3430						
172.000	.9780						.4690								
180.000	.9780	.0150	-.7870	-.6460	-.0820	.4190			-.0670		-.9850	-.6190	-.3520	-.0690	-.0720

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3430							-.3450		-.1910
40.000	.2510	.3040		.2420	.1490	-.0500	-.4430			-.2060
70.000		-.6630	-.7950	-.6160	-.4690	-.4280	-.3430	-.3170		
90.000		-.7080	-.8450	-.9230	-1.0050	-.3120	-.4480	-.3550		
105.000				-.7110	-.7540	-.5230	-.4710	-.4050		
110.000									-.3650	
120.000		-.4130	-.3310	-.4730	-.6310	-.8730	-.3920	-.3180	-.3840	
135.000				.3420	-.0130	-.6650	-.5780	-.2150		
150.000		-.2820	-.1220	.1700	-.1080	-.5450	-.5240	-.3220		
165.000		-.2400		.0920	.0010	-.4550	-.4610	-.2840		
180.000		-.3020	-.1510	-.0850						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPB27) (01 MAY 73)

AMES 11-7U7 OA12 OBA ORBITER FUSELAGE

REFERENCE DATA

SREF = 2.421U SQ.FT. XMRP = 28.53U0 INCHES
LREF = 39.849U INCHES YMRP = .UUUU INCHES
BREF = 39.849U INCHES ZMRP = .UUUU INCHES
SCALE = .U3UU SCALE

PARAMETRIC DATA

ALPHA = -4.UUU RUDDER = .UUU
ELEVON = -2U.UUU RUDFLR = .UUU

MACH (1) = .6U BETA (1) = -4.91U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.UUUU	.UU75	.U188	.U339	.U6U2	.1355	.1546	.1581	.1732	.1958	.2259	.2711	.32U0	.3953	.512U
PHI															
.UUU	.964U	.226U	.UUUU	-.879U	-.174U	-.U77U			-.U79U		-.U96U	-.U8U	-.U65U	-.U51U	-.U63U
2U.UUU	.964U		-.589U	-.783U	-.244U	-.124U			-.119U		-.129U				
4U.UUU	.964U		-.3U4U	-.6U2U	-.259U	-.298U			-.3U4U		-.345U	-.269U	-.186U	-.119U	-.U96U
55.UUU	.964U		-.113U	-.388U	-.U81U	-.U51U			-.U44U		-.1U3U				
7U.UUU	.964U		.U16U	-.25U0	.U4U	.U38U			-.U4U		-.U97U	-.323U	-.U37U	.U62U	.U96U
9U.UUU	.964U	.711U	.113U	-.144U	.U77U	.U52U			-.U61U		-.1U4U	-.351U	-.U45U	.U39U	.U63U
1U5.UUU	.964U														
11U.UUU	.964U														
12U.UUU	.964U		.252U	.U73U	.199U	.174U			-.U4U		-.137U	-.211U	-.U29U	.U25U	.U56U
135.UUU	.964U									-.287U					
142.UUU	.964U								.U39U		-.384U	-.127U	-.U38U	.U12U	.U49U
15U.UUU	.964U		.279U	.181U	.284U	.457U		.394U							
157.UUU	.964U								-.U37U						
162.UUU	.964U										-.321U	-.114U	.129U	.U46U	.U47U
165.UUU	.964U								-.1UU						
169.UUU	.964U						.669U								
172.UUU	.964U								.222U		-.489U	-.152U	-.121U	-.U5U	-.U62U
18U.UUU	.964U	.695U	.15UU	.163U	.244U	.559U									

X/LB	.5073	.6626	.738U	.7869	.8283	.8848	.9262	.9639	1.UU15	1.U392
PHI										
.UUU	-.U82U							-.224U		-.175U
4U.UUU	-.131U	-.234U		-.3UUU	-.364U	-.453U	-.27U0			-.181U
7U.UUU		.U55U	.U75U	.145U	.246U	.265U	.186U	-.U69U		
9U.UUU		.U81U	.129U	.173U	.2U9U	.182U	.111U	-.U14U		
1U5.UUU				.2U1U	.146U	.122U	.U62U	.U37U		
11U.UUU									-.149U	
12U.UUU		.U93U	.233U	.315U	-.U1U6	.U31U	.U38U	-.U14U	-.129U	
135.UUU				.456U	.114U	-.U25U	.U03U	-.U55U		
15U.UUU		.U89U	.211U	.265U	.U55U	-.U42U	-.U11U	-.U94U		
165.UUU		.U93U		.274U	.229U	.U65U	-.U12U	-.139U		
18U.UUU		.U35U	.11UU	.154U						

AMES 11-7X7 OA12 OBA ORBITER FUSELAGE (RBPB27)

MACH (1) = .999 BETA (2) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0044	.0075	.0188	.0339	.0682	.1355	.1956	.1581	.1732	.1958	.2259	.2711	.3249	.3953	.5127
PHI															
.00	.9836	.1996	.1444	-.9510	-.1610	-.0790			-.1870		-.0960	-.0890	-.0620	-.0490	-.0520
2.00	.9836		-.6559	-.8549	-.1904	-.0940			-.1970		-.1130				
4.00	.9836		-.4479	-.6440	-.2130	-.1090			-.1990		-.2320	-.1850	-.1020	-.0740	-.0680
55.00	.9836		-.3190	-.5130	-.1260	-.0780			-.1920		-.1350				
7.00	.9836		-.2210	-.4170	-.0910	-.0410			-.1850		-.1550	-.3780	-.1670	.0360	.0790
9.00	.9836	.5240	-.1390	-.3360	-.0520	-.0540			-.1240		-.1910	-.4060	-.0790	.0060	.0430
105.00	.9836														
11.00	.9836														
125.00	.9836		.0480	-.0930	.0630	.0240			-.2150		-.2690	-.2550	-.0720	-.0310	.0350
135.00	.9836														
142.00	.9836									-.4060					
155.00	.9836		.1804	.1440	.2120	.3470			-.1160		-.3830	-.1480	-.0590	-.0310	.0320
157.00	.9836							.2440							
162.00	.9836								-.1910						
165.00	.9836										-.3740	-.1240	.0210	-.0060	.0350
169.00	.9836								-.1440						
172.00	.9836						.6924								
180.00	.9836	.7268	.1730	.1050	.2590	.5860			.2420		-.4590	-.1180	-.0420	-.0150	.0290

X/LB	.5873	.6828	.7380	.7869	.8203	.8648	.9282	.9639	1.0015	1.0392
PHI										
.00	-.1488							-.2230		-.1790
4.00	-.1910	-.2140		-.2840	-.3510	-.3100	-.3140			-.1660
7.00		.0190	.0240	.0730	.1790	.2170	.1570	-.0330		
9.00		.0480	.0790	.0810	.1360	.1270	.0810	-.0340		
105.00				.0720	.0480	.0710	.0360	-.0560		
11.00									-.1410	
125.00		.0650	.1910	.1090	-.1940	-.0360	.0240	-.0340	-.1290	
135.00				.4810	.0570	-.1210	-.0580	-.0850		
150.00		.0780	.2160	.3480	.1150	-.1010	-.0840	-.1480		
165.00		.0790		.2890	.2230	-.0630	-.1110	-.1320		
180.00		.0790	.1870	.2010						

AMES 11-7X7 OA12 OBA ORBITER FUSELAGE (RBP827)

MACH (1) = .999 BETA (3) = 5.20

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0180	.0339	.0682	.1355	.1946	.2581	.1732	.1958	.2299	.2711	[illegible]	.3953	.5125
PHI															
.000	.9982	.1906	.0000	-.0930	-.1695	-.1040			-.1408		-.1090	-.1040	-.0682	-.0540	-.0640
2.000	.9982		-.7130	-.8230	-.1880	-.1089			-.1040		-.1102				
4.000	.9982		-.5940	-.6880	-.1840	-.1110			-.1140		-.1610	-.1230	-.0630	-.0440	-.0380
55.000	.9982		-.5130	-.6350	-.1510	-.1090			-.1180		-.1530				
7.000	.9982		-.4480	-.5630	-.1540	-.1090			-.1390		-.1970	-.3910	-.1401	.0070	.0590
9.000	.9982	.3210	-.3010	-.5010	-.1590	-.1450			-.1990		-.2390	-.4110	-.1050	-.0110	.0270
105.000	.9982														
110.000	.9982														
120.000	.9982		-.1550	-.2710	-.1050	-.1270			-.4140		-.2620	-.2040	-.1170	-.1420	.0110
135.000	.9982														
142.000	.9982									-.0190					
150.000	.9982		.0540	-.1440	.0980	.1980			-.2590		-.3640	-.1770	-.1082	-.0360	.0160
157.000	.9982							.1020							
162.000	.9982								-.3910						
165.000	.9982										-.3890	-.1370	-.0770	-.0510	-.0250
169.000	.9982								-.2250						
172.000	.9982						.5650								
180.000	.9982	.7140	.1560	.1650	.2470	.5530			.2190		-.4790	-.1400	-.1170	-.1440	-.1440

X/LB	.5873	.6826	.7580	.7889	.8283	.8648	.9282	.9639	1.0015	1.0382
PHI										
.000	-.1682							-.2190		-.1780
4.000	-.1690	-.1710		-.2560	-.3210	-.5030	-.3270			-.1720
7.000		-.1030	-.0170	.0160	.1300	.1690	.1220	-.1440		
9.000		.0180	.0280	.0140	.0790	.0980	.0810	-.1430		
105.000				-.0290	-.0390	.0200	.0480	-.0680		
110.000									-.1580	
120.000		.0380	.1270	-.0860	-.3080	-.1010	-.0350	-.0580	-.1340	
135.000				.4480	-.0780	-.2580	-.1450	-.1380		
150.000		.0540	.1080	.3280	.1040	-.1220	-.1630	-.1680		
165.000		.0160		.2580	.1850	-.2370	-.1970	-.1280		
180.000		.0450	.1290	.1610						

AMES 11-7X7 OA12 OBA ORBITER FUSELAGE (RBPB27)

MACH (2) = .897 BETA (1) = -4.98

SECTION (11)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0482	.1355	.1946	.1581	.1732	.1958	.2259	.2711	.3250	.3953	.5125
PHI															
.000	1.1550	.4530	.0000	-.0440	-.0970	-.0530			-.1050		-.1630	-.1360	-.0520	-.0220	-.0030
20.000	1.1550		-.2080	-.7490	-.4210	-.1140			-.1370		-.2210				
40.000	1.1550		-.0620	-.7780	-.2990	-.3120			-.3550		-.4190	-.4530	-.1950	-.0870	-.0350
55.000	1.1550		.0690	-.5170	-.0780	-.0330			-.0470		-.1280				
75.000	1.1550		.1520	-.3390	.0190	.0750			-.0190		-.1110	-.0920	.0230	.0040	.1220
90.000	1.1550	.0440	.2140	-.1940	.0970	.1140			-.0030		-.1190	-.0760	.0240	.0650	.0990
105.000	1.1550														
110.000	1.1550														
120.000	1.1550		.3160	.0670	.2430	.2680			.0180		-.1940	-.0980	.0260	.0480	.0490
135.000	1.1550														
142.000	1.1550									-.7210					
150.000	1.1550		.5310	.1990	.3290	.3710			.2560		-.4820	-.0970	-.0140	.0290	.0670
157.000	1.1550							.5530							
162.000	1.1550								.1640						
165.000	1.1550										-.6530	-.3730	-.0220	.0320	.0630
180.000	1.1550								.0470						
172.000	1.1550						.9160								
180.000	1.1550	.0120	.1900	.1050	.2910	.0910			.3830		-1.1140	-.2220	-.0950	-.0210	.0180

X/LB	.5073	.6028	.7380	.7880	.8283	.8840	.9762	.9639	1.0015	1.0392
PHI										
.000	-.0170							-.5010		-.1930
40.000	-.0380	-.2180		-.2320	-.3330	-.3870	-.3630			-.2230
75.000		.0490	.3140	.1810	.3480	.3490	.2030	.0470		
90.000		.1110	.1620	.2150	.2810	.2630	.2560	.0110		
105.000				.2540	.1970	.2480	.1480	-.0490		
110.000									-.2290	
120.000		.1160	.2750	.3810	.0190	.0980	.1140	.0440	-.1930	
135.000				.5330	.1820	.0270	.0690	-.0290		
150.000		.1140	.2670	.3340	.1210	.0460	.0450	-.0830		
165.000		.1190		.3470	.2950	.1250	.0780	-.1690		
180.000		.0870	.1620	.2210						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7X7 OA12 OEA ORBITER FUSELAGE (RBPB27)

MACH (2) = .890 BETA (2) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1620	.4750	.1440	-.6120	-.5130	-.0330			-.0920		-.1370	-.1190	-.0460	-.0140	.0030
2.000	1.1620		-.5480	-.7140	-.4860	-.1630			-.1070		-.1650				
4.000	1.1620		-.1830	-.7930	-.2330	-.1780			-.2260		-.2960	-.3090	-.0690	-.0320	.0060
55.000	1.1620		-.0980	-.7780	-.1420	-.0580			-.1290		-.1620				
7.000	1.1620		-.0470	-.6540	-.0540	-.0010			-.1180		-.1730	-.7120	-.0460	.0560	.0980
9.000	1.1620	.6840	.0010	-.4770	-.0220	-.0030			-.1540		-.2100	-.7940	-.0170	.0430	.0690
105.000	1.1620														
110.000	1.1620														
120.000	1.1620		.1330	-.1260	.1130	.1280			-.1730		-.2470	-.6810	-.0160	.0250	.0670
135.000	1.1620									-1.0750					
142.000	1.1620								.1640		-.6780	-.2740	-.0680	.0210	.0590
150.000	1.1620		.2350	.1490	.2560	.4810		.4180							
157.000	1.1620								.0550						
162.000	1.1620										-.8330	-.3080	-.0510	.0350	.0610
165.000	1.1620								.0760						
169.000	1.1620						.7990								
172.000	1.1620								.4050		-1.0960	-.2410	-.0160	.0150	.0540
180.000	1.1620	.8350	.2050	.2440	.3180	.7170									

X/LB	.0875	.0826	.7500	.7869	.6283	.0648	.9282	.9839	1.0015	1.0382
PHI										
.000	-.0110							-.0830	-.1850	
4.000	-.1660	-.1430		-.2270	-.3070	-.3780	-.5840		-.2590	
7.000		.0460	.0500	.0980	.2270	.2970	.2480	-.0180		
9.000		.0680	.1110	.1130	.1650	.2110	.1880	-.0490		
105.000				.1070	.0760	.1470	.1120	-.0360		
110.000									-.2230	
120.000		.1030	.2350	.1720	-.2110	.0360	.0670	-.0270	-.1970	
135.000				.5440	.1240	-.0780	-.1680	-.0780		
150.000		.1140	.2820	.4080	.1920	-.0620	-.0430	-.1440		
165.000		.1140		.3820	.2850	-.0160	-.0520	-.1820		
180.000		.1160	.2240	.2770						

AMES 11-7x7 OA12 OEA ORBITER FUSELAGE (BBPB27)

MACH (2) = .899 BETA (3) = 9.330

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1946	.1981	.1732	.1958	.2259	.2711	.3254	.3953	.5127
PHI															
.000	1.1380	.4360	.1660	-.6410	-.5130	-.1480			-.1190		-.1810	-.1980	-.2510	-.2290	-.1740
25.000	1.1380		-.3870	-.6660	-.5180	-.1420			-.1480		-.1660				
40.000	1.1380		-.2930	-.8110	-.2620	-.1920			-.1550		-.2540	-.2440	-.2390	-.2180	-.1370
55.000	1.1380		-.2570	-.6360	-.1940	-.1740			-.1630		-.3190				
70.000	1.1380		-.2310	-.8660	-.2510	-.1570			-.1970		-.4330	-.6780	-.4320	-.2410	-.1870
90.000	1.1380	.5180	-.2560	-.7590	-.1140	-.1870			-.2550		-.8190	-.7450	-.4420	-.2380	-.1930
105.000	1.1380														
110.000	1.1380														
120.000	1.1380		-.1490	-.3280	-.1640	-.1220			-.3990		-.6910	-.5230	-.2960	-.1420	-.1430
135.000	1.1380														
142.000	1.1380									-1.1830					
150.000	1.1350		.1280	-.1640	.1340	.3470			.1480		-.6190	-.4870	-.2480	-.1270	-.1410
157.000	1.1380							.2300							
162.000	1.1380								-.1040						
165.000	1.1380										-.6560	-.5510	-.3150	-.1490	-.0140
169.000	1.1380								.1300						
172.000	1.1380						.7220								
180.000	1.1350	.8110	.1940	.1830	.2960	.6840			.3720		-.9780	-.6940	-.2970	-.1140	.0210

X/LB	.5071	.6626	.7380	.7889	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
.000	-.0290							-.5840		-.1880
40.000	.0040	-.1250		-.2390	-.2950	-.3430	-.6530			-.2130
70.000		.0420	.0660	.0660	.1490	.2290	.1980	-.0550		
90.000		.0690	.0660	.0010	.0770	.1550	.1240	-.0480		
105.000				-.0360	-.0560	.0610	.0710	-.0640		
110.000									-.2490	
120.000		.0690	.1780	-.0420	-.5030	-.0520	.0690	-.0760	-.2140	
135.000				.5170	.0150	-.2760	-.1280	-.1540		
150.000		.0730	.2020	.3330	.2130	-.2480	-.1770	-.2480		
165.000		.0540		.3050	.2420	-.2380	-.2040	-.1750		
180.000		.0740	.1830	.2340						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A (RSPB20) (01 MAY 73)

AMES 11-7D7 OA12 OBA ORBITER FUSELAGE

REFERENCE DATA

PARAMETRIC DATA

SREF = 2.421E 00 SQ.FT. XMRP = 28.530E 00 INCHES
LREF = 39.849E 00 INCHES YMRP = .000E 00 INCHES
BREF = 39.849E 00 INCHES ZMRP = .000E 00 INCHES
SCALE = .039E 00 SCALE

ALPHA = .00E 00 RUDDER = .00E 00
ELEVON = -20.00E 00 RUDFLR = .00E 00

MACH (1) = .597 BETA (1) = -7.97E 00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0642	.1355	.1906	.1581	.1732	.1958	.2239	.2711	.3216	.3955	.5125
PHI															
.0000	.9730	.3440	.0000	-.7290	-.1420	-.0680			-.0710		-.0780	-.0780	-.0550	-.0430	-.0400
25.0000	.9730		-.3590	-.6500	-.2190	-.0990			-.1140		-.1120				
40.0000	.9730		-.4680	-.4290	-.1780	-.2450			-.2550		-.2790	-.2140	-.1410	-.0890	-.0550
55.0000	.9730		.1110	-.2120	.0330	.0540			.0420		-.0180				
70.0000	.9730		.2070	-.0910	.1150	.1280			.0790		-.0320	-.2910	-.0870	.0080	.0590
90.0000	.9730	.0180	.2470	-.0220	.1620	.1470			.0840		-.0550	-.3490	-.0370	.0250	.0230
105.0000	.9730														
115.0000	.9730								.1280		-.1720	-.2420	-.1650	-.0820	.0050
125.0000	.9730		.2610	.0910	.2380	.2490				-.2910					
135.0000	.9730								.0310		-.5160	-.1750	-.0840	-.0420	-.0110
142.0000	.9730		.1840	.1050	.2350	.4430									
150.0000	.9730							.4640	-.0640		-.3990	-.1450	-.0770	-.0250	.0060
157.0000	.9730														
162.0000	.9730								-.2190						
165.0000	.9730						.5940				-.5870	-.2220	-.2170	-.2130	-.1730
169.0000	.9730								.0640						
172.0000	.9730														
180.0000	.9730	.5460	-.1430	.0310	.1390	.4840									

X/LB	.5873	.6826	.7580	.7869	.8283	.8648	.9082	.9639	1.0015	1.0382
PHI										
.0000	-.0580							-.2180		-.1980
40.0000	-.0780	-.1710		-.2870	-.3380	-.4070	-.2970			-.1780
70.0000		-.0170	.0410	.1400	.2770	.2750	.2130	.0280		
90.0000		.0190	.1080	.1930	.2410	.1910	.1230	-.0480		
105.0000				.2570	.1970	.1410	.0760	-.0310		
115.0000									-.1370	
125.0000		.0180	.1980	.4290	.0790	.0320	.0310	-.0240	-.1240	
135.0000				.2970	.0320	-.0840	-.0390	-.0980		
150.0000		.0280	.1450	.1390	-.0700	-.0190	.0220	-.1260		
165.0000		.0450		.1970	.1650	.0720	.0170	-.1410		
180.0000		-.1170	-.0220	.0430						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7X7 OA12 OEA ORBITER FUSELAGE (RDPB28)

MACH (1) = .996 BETA (2) = -3.94

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0482	.1355	.1946	.1581	.1732	.1958	.2259	.2711	.3274	.3953	.5123
PHI															
.000	.9880	.3890	.1000	-.7070	-.1120	-.1450			-.0540		-.0640	-.0620	-.0420	-.0280	-.0240
2.000	.9880		-.3750	-.6310	-.1550	-.0680			-.0670		-.0680				
4.000	.9880		-.1510	-.4620	-.1340	-.1420			-.1470		-.1040	-.1470	-.0790	-.0430	-.0230
55.000	.9880		-.0240	-.3090	-.0690	.0250			.0610		-.0610				
7.000	.9880		.0330	-.2230	.0260	.0560			.0240		-.0920	-.3480	-.0680	.0140	.0320
9.000	.9880	.8950	.0620	-.1690	.0780	.1650			.0420		-.1240	-.3970	-.0680	-.0420	.0010
105.000	.9880														
110.000	.9880														
120.000	.9880		.1120	-.0180	.1580	.1580			-.0040		-.2160	-.2590	-.0770	-.0220	.0040
135.000	.9880									-.3750					
142.000	.9880										-.4960	-.1730	-.0760	-.0310	.0000
150.000	.9880		.1110	.0590	.2020	.4040			-.0590						
157.000	.9880							.3280							
162.000	.9880								-.1760						
165.000	.9880										-.3970	-.1550	-.0780	-.0280	.0050
169.000	.9880								-.2370						
172.000	.9880						.6120								
180.000	.9880	.5800	-.0190	.0590	.1730	.5220			.1240		-.5320	-.1630	-.1460	-.0660	-.0310

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9636	1.0015	1.0392
PHI										
.000	-.0420							-.2050		-.1770
4.000	-.0480	-.1330		-.2410	-.3180	-.4900	-.2780			-.1770
7.000		-.0480	-.0050	.0660	.2240	.2370	.1810	.0460		
9.000		-.0130	.0650	.1280	.1760	.1470	.0930	-.0230		
105.000				.1680	.1180	.0970	.0480	-.0480		
110.000									-.1480	
120.000		.0170	.1790	.3030	-.0300	-.0110	.0140	-.0320	-.1270	
135.000				.3690	.0490	-.0860	-.0370	-.0880		
150.000		.0390	.1810	.2550	-.0070	-.0670	-.0480	-.1240		
165.000		.0390		.2160	.1720	-.0080	-.0570	-.1360		
180.000		-.0430	.0780	.1110						

AMES 11-7.7 OA12 OEA ORBITER FUSELAGE (RBP820)

MACH (1) = .990 A (3) = .0%

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0180	.0339	.0682	.1355	.1946	.1981	.1732	.1958	.2239	.2711	.3216	.3953	.5120
PHI															
.000	.9940	.3890	.0000	-.7170	-.1150	-.0460			-.0570		-.0690	-.0640	-.0380	-.0310	-.0250
20.000	.9940		-.4280	-.6450	-.1290	-.0540			-.0570		-.0770				
40.000	.9940		-.2690	-.3460	-.1220	-.0940			-.1[illegible]		-.1430	-.1210	-.0530	-.0320	-.0110
55.000	.9940		-.1870	-.4180	-.0620	-.0200			-.0510		-.1120				
70.000	.9940		-.1540	-.3580	-.0510	-.0240			-.0570		-.1440	-.3910	-.0930	-.0130	.0150
90.000	.9940	.5470	-.1380	-.3120	-.0180	-.0110			-.0780		-.1840	-.4360	-.0890	-.0210	-.0140
105.000	.9940														
110.000	.9940														
120.000	.9940		-.0480	-.1420	.0540	.0570			-.1490		-.2660	-.2820	-.0690	-.0290	.0060
135.000	.9940														
142.000	.9940									-.4550					
150.000	.9940		.0210	.0610	.1470	.3280			-.1650		-.4700	-.1860	-.0840	-.0350	-.0150
157.000	.9940							.2140							
162.000	.9940								-.2950						
165.000	.9940										-.4360	-.1550	-.0820	-.0290	-.0110
169.000	.9940								-.2790						
172.000	.9940						.6400								
180.000	.9940	.5840	-.0170	.0630	.1660	.5410			.1360		-.5170	-.1460	-.1140	-.0360	-.0140

X/LB	.5075	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0430							-.2480		-.1750
40.000	-.0330	-.1190		-.2310	-.3090	-.5140	-.3110			-.1650
70.000		-.0730	-.0440	.0330	.1660	.1970	.1480	-.0190		
90.000		-.0330	.0230	.0540	.1090	.1220	.0640	-.0330		
105.000				.0990	.0440	.0520	.0210	-.0680		
110.000									-.1410	
120.000		.0480	.1530	.1440	-.1740	-.0580	-.0130	-.0530	-.1340	
135.000				.4320	.0160	-.1380	-.0690	-.1040		
150.000		.0330	.1710	.2880	.0480	-.1370	-.0450	-.1530		
165.000		.0330		.2320	.1640	-.1000	-.1290	-.1410		
180.000		.0480	.1290	.1530						

AMES 11-7U7 OA12 OPA ORBITER FUSELAGE (RBF928)

MACH (1) = .595 BETA (4) = 4.19U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3264	.3953	.5120
PHI															
.000	.9880	.3750	.0000	-.7080	-.1050	-.0420			-.0500		-.0620	-.0590	-.0410	-.0250	-.0190
25.000	.9880		-.4750	-.6450	-.1150	-.0430			-.0450		-.0740				
45.000	.9880		-.3830	-.5450	-.1200	-.0540			-.0640		-.1220	-.1030	-.0430	-.0230	-.0040
55.000	.9880		-.3450	-.5030	-.0910	-.0410			-.0730		-.1240				
75.000	.9880		-.3310	-.4690	-.1100	-.0460			-.0950		-.1740	-.4010	-.1120	-.0200	.1690
90.000	.9880	.3940	-.3220	-.4320	-.0860	-.0730			-.1350		-.2140	-.4290	-.1140	-.0220	-.0070
105.000	.9880														
110.000	.9880														
120.000	.9880		-.1950	-.2560	-.0390	-.0410			-.2840		-.2790	-.2810	-.0870	-.0300	-.0010
135.000	.9880														
142.000	.9880									-.5690					
150.000	.9880		-.0590	-.0690	.0790	.2270			-.2730		-.4410	-.1820	-.0860	-.0380	-.0010
157.000	.9880							.0480							
162.000	.9880								-.4330						
165.000	.9880										-.4260	-.1540	-.1160	-.0350	-.0110
169.000	.9880								-.3250						
172.000	.9880						.5450								
180.000	.9860	.5810	-.0140	.0590	.1800	.5190			.1190		-.5230	-.1530	-.1200	-.0580	-.0270

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0450							-.2070		-.1710
45.000	-.0120	-.0920		-.2030	-.2800	-.5020	-.3260			-.1640
70.000		-.0820	-.0610	-.0030	.1250	.1660	.1290	-.0190		
90.000		-.0370	-.0050	.0030	.0630	.0820	.0520	-.0430		
105.000				-.0150	-.0220	.0230	.0070	-.0690		
110.000									-.1460	
120.000		.0010	.1230	-.0080	-.3020	-.0930	-.0280	-.0570	-.1320	
135.000				.4440	-.0570	-.2140	-.1120	-.1180		
150.000		.0300	.1520	.3290	.0780	-.2130	-.1590	-.1730		
165.000		.0120		.2360	.1620	-.2160	-.1800	-.1260		
180.000		.0140	.0970	.1340						

AMES 11-7U7 OA12 CRA ORBITER FUSELAGE (RBPB28)

MACH (1) = .598 BETA (5) = 8.29U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	..732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.9260	.3590	.0000	-.7280	-.1340	-.0630			-.0580		-.0850	-.0720	-.0560	-.0390	-.0410
20.000	.9260		-.5410	-.6820	-.1270	-.0520			-.0510		-.0890				
40.000	.9260		-.5160	-.6050	-.1400	-.0540			-.0660		-.1490	-.1230	-.0680	-.0320	-.0150
55.000	.9260		-.5220	-.6220	-.1250	-.0750			-.1000		-.1510				
70.000	.9260		-.5110	-.6020	-.1460	-.0860			-.1250		-.2010	-.4030	-.1110	-.0240	.0040
90.000	.9260	.2250	-.5110	-.5590	-.1450	-.1320			-.1880		-.2400	-.4210	-.1020	-.0250	-.0690
105.000	.9260														
110.000	.9260														
120.000	.9260		-.3500	-.3850	-.1330	-.1550			-.4270		-.2950	-.2900	-.1000	-.0430	-.0130
135.000	.9260														
142.000	.9260									-.8540					
150.000	.9260		-.1610	-.1660	-.0060	.0930			-.3880		-.4300	-.2060	-.1080	-.0510	-.0050
157.000	.9260							-.1340							
162.000	.9260								-.6020						
165.000	.9260										-.4690	-.1760	-.1070	-.1110	-.0710
169.000	.9260								-.3970						
172.000	.9260						.4510								
180.000	.9260	.5560	-.0330	.0200	.1400	.4580			.0640		-.5560	-.2130	-.1630	-.1650	-.1410

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0520							-.2130		-.1880
40.000	-.0150	-.0830		-.1850	-.2620	-.4970	-.3580			-.1850
70.000		-.0980	-.0990	-.0350	.0940	.1430	.1140	-.0290		
90.000		-.0490	-.0400	-.0390	.0280	.0690	.0440	-.0410		
105.000				-.0700	-.0890	-.0030	-.0170	-.0690		
110.000									-.1520	
120.000		-.0210	.0700	-.1310	-.4480	-.1320	-.0640	-.0690	-.1370	
135.000				.4340	-.1340	-.3150	-.1860	-.1480		
150.000		-.0250	.0720	.2210	.0500	-.2830	-.2310	-.1940		
165.000		-.0580		.1850	.1000	-.3720	-.2930	-.1250		
180.000		-.1050	-.0430	.0110						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7X7 OA12 O2A ORBITER FUSELAGE (RBFB2H)

MACH (2) = .900 BETA (1) = -8.080

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1320	.5590	.0000	-.7260	-.2810	-.0420			-.0780		-.1420	-.1460	-.0710	-.0220	.0130
20.000	1.1320		-.1170	-.7960	-.2410	-.0810			-.1050		-.1780				
40.000	1.1320		.1180	-.5530	-.2060	-.2480			-.2840		-.3750	-.4290	-.1430	-.0700	-.0650
55.000	1.1320		.2530	-.2720	.0410	.0860			.0540		-.0370				
[illegible]	1.1320		.3210	-.1310	.1280	.1720			.1030		-.0320	-.6270	.0070	.0660	.0900
90.000	1.1320	.9390	.3350	-.0440	.2070	.2130			.1180		-.0490	-.7470	.0160	.0490	.0480
105.000	1.1320														
110.000	1.1320														
120.000	1.1320		.3280	.0940	.2840	.3450			.1960		-.1430	-.8120	.0010	.0110	.0310
135.000	1.1320									-.4420					
142.000	1.1320								.2560		-.5830	-.5990	-.0280	-.0120	.0180
150.000	1.1320		.2440	.1180	.2810	.5760		.5740							
157.000	1.1320								.1480						
162.000	1.1320										-.5450	-.5090	-.0530	.0110	.0350
165.000	1.1320								-.0180						
169.000	1.1320						.7640								
172.000	1.1320								.2980		-1.1280	-.4880	-.2480	-.0920	-.1350
180.000	1.1320	.6840	.0660	.0410	.1780	.6150									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0660							-.5160		-.1950
4.000	.0600	-.1040		-.1860	-.2880	-.3440	-.5030			-.2150
7.000		-.0210	.0330	.1860	.3400	.3560	.3070	.0280		
9.000		.0120	.1050	.2430	.2980	.2660	.2480	.0190		
105.000				.3070	.2510	.2120	.1510	-.0110		
110.000									-.2270	
120.000		.0180	.2160	.4980	.1170	.0920	.0850	-.0210	-.1870	
135.000				.3840	.0980	-.0280	.0190	-.0670		
150.000		.0350	.1980	.2030	-.0280	.0510	.0710	-.0830		
165.000		.0580		.2600	.2480	.1330	.0960	-.1760		
180.000		-.0620	.0620	.1940						

AMES 11-7X7 OA12 OEA ORBITER FUSELAGE (RBPB28)

MACH (2) = .897 BETA (2) = -4.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	1.1720	.5870	.0000	-.6360	-.3320	-.0220			-.0590		-.1220	-.1320	-.0550	-.0080	.0230
25.000	1.1720		-.1400	-.6840	-.1950	-.0470			-.0770		-.1480				
40.000	1.1720		.0290	-.6940	-.1440	-.1310			-.1750		-.2620	-.3230	-.0730	-.0250	.0240
55.000	1.1720		.1190	-.4910	.0090	.0560			.0000		-.0850				
70.000	1.1720		.1560	-.3280	.0530	.1070			.0180		-.1050	-.6710	-.0210	.0380	.0960
90.000	1.1720	.8250	.1590	-.2370	.1110	.1320			.0170		-.1240	-.7880	-.0240	.0290	.0310
105.000	1.1720														
110.000	1.1720														
120.000	1.1720		.1740	-.0480	.1960	.2610			.0570		-.1960	-.8460	.0020	.0140	.0300
135.000	1.1720														
142.000	1.1720									-.7650					
150.000	1.1720		.1550	.0520	.2460	.5320			.2010		-.5840	-.5630	-.0320	.0070	.0280
157.000	1.1720							.5060							
162.000	1.1720								.0850						
165.000	1.1720										-.8290	-.4130	-.0360	.0170	.0270
169.000	1.1720								-.0680						
172.000	1.1720						.7810								
180.000	1.1720	.6950	.0010	.0500	.2190	.6620			.3100		-1.1880	-.3080	-.1550	-.0180	.0020

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0220							-.5760		-.1940
40.000	.0360	-.0620		-.1580	-.2570	-.3210	-.5400			-.1990
70.000		-.0470	-.0170	.1130	.2770	.3050	.2710	.1050		
90.000		-.0140	.0630	.1610	.2170	.2170	.1710	-.0060		
105.000				.1990	.1570	.1630	.1160	-.0310		
110.000									-.2260	
120.000		.0200	.1990	.3440	-.0160	.0480	.0620	-.0350	-.1980	
135.000				.4450	.1180	-.0390	.0090	-.0760		
150.000		.0480	.2020	.2740	.0540	-.0150	.0040	-.1190		
165.000		.0320		.2750	.2170	.0410	.0070	-.1680		
180.000		.0060	.1240	.1840						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBF928)

MACH (2) = .9UU BETA (3) = .UU

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.UUUU	.UU75	.U188	.U339	.U6U2	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.32UU	.3953	.512U
PHI															
.UUU	1.176U	.586U	.UUUU	-.6U8U	-.331U	-.U14U			-.U51U		-.114U	-.121U	-.U47U	.UU2U	.U3UU
2U.UUU	1.176U		-.186U	-.686U	-.226U	-.U25U			-.U58U		-.13UU				
4U.UUU	1.176U		-.U64U	-.755U	-.U97U	-.U69U			-.113U		-.24U	-.259U	-.U4UU	.UU3U	.U41U
55.UUU	1.176U		-.U13U	-.699U	-.U8UU	.U24U			-.U46U		-.146U				
7U.UUU	1.176U		.UU6U	-.579U	.U07U	.U54U			-.U47U		-.186U	-.698U	-.U43U	.U25U	.U5UU
9U.UUU	1.176U	.7UUU	-.UU8U	-.477U	.U36U	.U64U			-.U64U		-.227U	-.8U6U	-.U59U	.U23U	.U22U
1U5.UUU	1.176U														
11U.UUU	1.176U														
12U.UUU	1.176U		.U38U	-.2U3U	.1111	.172U			-.U78U		-.361U	-.843U	-.1U9U	.U19U	.U33U
135.UUU	1.176U														
142.UUU	1.176U									-1.U72U					
15U.UUU	1.176U		.U84U	-.U22U	.2U4U	.472U			.136U		-.774U	-.434U	-.U25U	.U14U	.U29U
157.UUU	1.176U							.4U8U							
162.UUU	1.176U								.U61U						
165.UUU	1.176U										-.913U	-.391U	-.U28U	.U27U	.U33U
169.UUU	1.176U								-.U14U						
172.UUU	1.176U						.767U								
18U.UUU	1.176U	.7U1U	.U16U	.U63U	.238U	.68UU			.324U		-.792U	-.496U	-.U18U	.U11U	.U28U

X/LB	.9373	.6626	.738U	.7869	.8283	.884U	.9262	.9639	1.UU15	1.UU92
PHI										
.UUU	.U31U							-.587U		-.195U
4U.UUU	.U52U	-.U33U		-.142U	-.233U	-.3U9U	-.583U			-.2U1U
7U.UUU		-.U63U	-.U55U	.U47U	.2U6U	.26UU	.229U	-.U17U		
9U.UUU		-.U18U	.U28U	.U7UU	.135U	.173U	.14UU	-.U21U		
1U5.UUU				.U77U	.U55U	.118U	.U88U	-.U49U		
11U.UUU									-.237U	
12U.UUU		.U22U	.178U	.173U	-.212U	.U41U	.U42U	-.U5UU	-.215U	
135.UUU				.4915	.U71U	-.1U2U	-.U28U	-.U95U		
15U.UUU		.U9UU	.2U8U	.3311	.1128	-.112U	-.U73U	-.165U		
165.UUU		.U55U		.297U	.213U	-.U65U	-.U87U	-.161U		
18U.UUU		.U53U	.164U	.2119						

AMES 11-7X7 OA12 OBA ORBITER FUSELAGE (RBPB28)

MACH (2) = .9[illegible] BETA (4) = 4.24[illegible]

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.[illegible]	.[illegible]75	.[illegible]188	.[illegible]339	.[illegible]502	.1355	.19[illegible]6	.1581	.1732	.1958	.2259	.2711	.32[illegible]	.3953	.512[illegible]
PHI															
.[illegible]	1.168[illegible]	.59[illegible]	.[illegible]	-.621[illegible]	-.348[illegible]	-.[illegible]15[illegible]			-.[illegible]54[illegible]		-.131[illegible]	-.13[illegible]	-.[illegible]5[illegible]	-.[illegible]8[illegible]	.[illegible]24[illegible]
2[illegible].[illegible]	1.168[illegible]		-.221[illegible]	-.68[illegible]	-.295[illegible]	-.[illegible]16[illegible]			-.[illegible]5[illegible]		-.139[illegible]				
4[illegible].[illegible]	1.168[illegible]		-.154[illegible]	-.755[illegible]	-.[illegible]71[illegible]	-.[illegible]29[illegible]			-.[illegible]75[illegible]		-.213[illegible]	-.21[illegible]	-.[illegible]42[illegible]	.[illegible]3[illegible]	.[illegible]4[illegible]
55.[illegible]	1.168[illegible]		-.14[illegible]	-.812[illegible]	.[illegible]9[illegible]	-.[illegible]2[illegible]			-.[illegible]76[illegible]		-.238[illegible]				
7[illegible].[illegible]	1.168[illegible]		-.142[illegible]	-.745[illegible]	.[illegible]22[illegible]	.[illegible]1[illegible]			-.[illegible]95[illegible]		-.347[illegible]	-.682[illegible]	-.[illegible]55[illegible]	.[illegible]18[illegible]	.[illegible]47[illegible]
9[illegible].[illegible]	1.168[illegible]	.568[illegible]	-.158[illegible]	-.695[illegible]	-.[illegible]7[illegible]	.[illegible]2[illegible]			-.131[illegible]		-.412[illegible]	-.792[illegible]	-.[illegible]66[illegible]	.[illegible]18[illegible]	.[illegible]31[illegible]
1[illegible]5.[illegible]	1.168[illegible]														
11[illegible].[illegible]	1.168[illegible]														
12[illegible].[illegible]	1.168[illegible]		-.[illegible]93[illegible]	-.4[illegible]3[illegible]	.[illegible]24[illegible]	.[illegible]76[illegible]			-.2[illegible]5[illegible]		-.556[illegible]	-.681[illegible]	-.[illegible]62[illegible]	.[illegible]16[illegible]	.[illegible]25[illegible]
135.[illegible]	1.168[illegible]														
142.[illegible]	1.168[illegible]									-1.161[illegible]					
15[illegible].[illegible]	1.168[illegible]		.[illegible]3[illegible]	-.122[illegible]	.132[illegible]	.384[illegible]			.[illegible]55[illegible]		-.612[illegible]	-.484[illegible]	[illegible]	.[illegible]41[illegible]	.[illegible]34[illegible]
157.[illegible]	1.168[illegible]							.274[illegible]							
162.[illegible]	1.168[illegible]								-.1[illegible][illegible]						
165.[illegible]	1.168[illegible]										-.695[illegible]	-.552[illegible]	-.[illegible]78[illegible]	.[illegible]29[illegible]	.[illegible]17[illegible]
169.[illegible]	1.168[illegible]								-.[illegible]32[illegible]						
172.[illegible]	1.168[illegible]						.717[illegible]								
18[illegible].[illegible]	1.168[illegible]	.678[illegible]	.[illegible]15[illegible]	.[illegible]55[illegible]	.228[illegible]	.663[illegible]			.3[illegible]9[illegible]		-.854[illegible]	-.523[illegible]	-.[illegible]1[illegible]	-.[illegible]8[illegible]	.[illegible]7[illegible]

X/LB	.5973	.6626	.738[illegible]	.7869	.8283	.8848	.9262	.9539	1.[illegible]015	1.[illegible]392
PHI										
.[illegible]	.[illegible]24[illegible]							-.568[illegible]		-.2[illegible]9[illegible]
4[illegible].[illegible]	.[illegible]52[illegible]	-.[illegible]15[illegible]		-.13[illegible]	-.216[illegible]	-.293[illegible]	-.59[illegible]			-.226[illegible]
7[illegible].[illegible]		-.[illegible]55[illegible]	-.[illegible]82[illegible]	-.[illegible]21[illegible]	.135[illegible]	.216[illegible]	.189[illegible]	-.[illegible]42[illegible]		
9[illegible].[illegible]		-.[illegible]16[illegible]	-.[illegible]3[illegible]	-.[illegible]22[illegible]	.[illegible]54[illegible]	.125[illegible]	.1[illegible]4[illegible]	-.[illegible]43[illegible]		
1[illegible]5.[illegible]				-.[illegible]34[illegible]	-.[illegible]46[illegible]	.[illegible]68[illegible]	.[illegible]51[illegible]	-.[illegible]7[illegible]		
11[illegible].[illegible]									-.239[illegible]	
12[illegible].[illegible]		.[illegible]23[illegible]	.134[illegible]	-.[illegible]4[illegible]	-.37[illegible]	-.[illegible]5[illegible]	.[illegible]3[illegible]	-.[illegible]72[illegible]	-.222[illegible]	
135.[illegible]				.465[illegible]	.[illegible]3[illegible]	-.212[illegible]	-.1[illegible][illegible]	-.138[illegible]		
15[illegible].[illegible]		.[illegible]44[illegible]	.172[illegible]	.322[illegible]	.135[illegible]	-.221[illegible]	-.157[illegible]	-.192[illegible]		
165.[illegible]		.[illegible]33[illegible]		.271[illegible]	.2[illegible]3[illegible]	-.222[illegible]	-.183[illegible]	-.16[illegible]		
18[illegible].[illegible]		.[illegible]21[illegible]	.134[illegible]	.189[illegible]						

AMES 11-7X7 OA12 OEA ORBITER FUSELAGE (RBPB28)

MACH (2) = .904 BETA (5) = 8.400

SECTION 1 : ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1946	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1280	.5630	.0000	-.7040	-.3180	-.0320			-.0610		-.1410	-.1410	-.0650	-.0220	.0150
20.000	1.1280		-.2670	-.6970	-.3250	-.0190			-.0540		-.1630				
40.000	1.1280		-.2500	-.6930	-.2760	-.0200			-.0710		-.2470	-.2460	-.0750	-.0140	.0320
55.000	1.1280		-.2750	-.6940	-.2270	-.0220			-.0980		-.2950				
75.000	1.1280		-.2910	-.6900	-.2140	-.0240			-.1320		-.4280	-.7450	-.0750	.0220	.0460
90.000	1.1280	.4290	-.3010	-.6850	-.1140	-.0460			-.1920		-.4980	-.7690	-.0880	.0230	.0280
105.000	1.1280														
110.000	1.1280														
120.000	1.1280		-.2210	-.5680	-.0980	-.0200			-.3320		-.6510	-.5290	-.1210	.0270	.0260
135.000	1.1280									-1.2360					
142.000	1.1280														
150.000	1.1280		-.0690	-.2130	.0320	.2640			-.0480		-.7010	-.5590	-.1830	.0270	-.0040
157.000	1.1280							.1150							
162.000	1.1280								-.2130						
165.000	1.1280										-.6530	-.5950	-.1440	-.0420	-.0410
169.000	1.1280								-.1670						
172.000	1.1280						.6250								
180.000	1.1280	.6880	.0130	.0260	.1820	.6050			.2740		-.8960	-.5410	-.1980	-.0780	-.1060

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0130							-.5240		-.1830
40.000	.0450	-.0140		-.1200	-.2480	-.2770	-.6220			-.2210
70.000		-.0570	-.0960	-.0840	.0790	.1720	.1520	-.1660		
90.000		-.0250	-.0290	-.0860	-.0150	.0890	.0730	-.0650		
105.000				-.0980	-.1560	.0240	.0220	-.0870		
110.000									-.2460	
120.000		.0680	.1020	-.0710	-.5760	-.1140	-.0420	-.0970	-.2270	
135.000				.4940	-.0680	-.3730	-.2480	-.1820		
150.000		-.0340	.0880	.1650	.0320	-.4230	-.3310	-.2880		
165.000		-.0340		.1940	.1360	-.4460	-.4110	-.1830		
180.000		-.0490	.0800	.1120						

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AMES 11-7X7 OA12 CRA ORBITER FUSELAGE (RBP929) (01 MAY 73)

REFERENCE DATA

SREF = 2.421 SQ.FT. XMRP = 28.539 INCHES
LREF = 39.849 INCHES YMRP = .000 INCHES
BREF = 39.849 INCHES ZMRP = .000 INCHES
SCALE = .030 SCALE

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000
ELEVON = -20.000 RUDFLR = .000

MACH (1) = .80 BETA (1) = -0.030

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1946	.1581	.1732	.1958	.2239	.2711	.3216	.3953	.5128
PHI															
.000	.9650	.5630	.0000	-.5080	-.0580	-.0650			-.0110		-.0310	-.0320	-.0110	.0090	.0170
20.000	.9650		-.0060	-.4330	-.0840	-.0140			-.0180		-.0450				
40.000	.9650		.1490	-.2210	-.0110	-.0520			-.0570		-.0950	-.0560	-.0110	.0210	.0510
59.000	.9650		.2990	-.0780	.1290	.1380			.1110		.0270				
71.000	.9650		.2820	-.0170	.1480	.1580			.1160		-.0180	-.0360	-.0670	-.0410	-.0440
90.000	.9650	.8190	.2270	-.0260	.1770	.1650			.1150		-.0580	-.0920	-.0910	-.0320	-.0620
105.000	.9650														
110.000	.9650														
120.000	.9650		.1220	.0010	.1810	.2210			.1710		-.2690	-.3240	-.1340	-.0910	-.0910
135.000	.9650									-.3710					
142.000	.9650								-.1650		-.6540	-.2210	-.1190	-.0830	-.0610
150.000	.9650		-.0150	-.0350	.1350	.3080		.3350							
157.000	.9650								-.2670						
162.000	.9650										-.4110	-.1770	-.1150	-.0550	-.0380
165.000	.9650								-.3860						
169.000	.9650						.5340								
172.000	.9650								-.1290		-.6220	-.2410	-.2160	-.3260	-.1630
180.000	.9650	.3080	-.2510	-.1140	.0560	.4180									

X/LB	.5073	.6626	.7380	.7869	.8283	.8648	.9262	.9639	1.0015	1.0398
PHI								-.1940		-.1760
.000	.0120									-.1680
.000	.0401	-.0380		-.1700	-.2650	-.4310	-.2290			
40.000		-.1240	-.0800	.1150	.2740	.2800	.2230	.0390		
70.000		-.1030	.0430	.1610	.2460	.1650	.1230	.0010		
90.000				.2710	.2190	.1460	.0750	-.0250		
105.000									-.1330	
110.000									-.1320	
120.000		-.0730	.1230	.4530	.0870	.0050	-.0020	-.0490		
135.000				.1760	-.0760	-.1620	-.1070	-.1490		
150.000		-.0360	.0040	.0590	-.1620	-.0990	-.0300	-.1210		
165.000		-.0070		.1260	.2140	.0300	-.0110	-.1460		
180.000		-.1160	-.0340	-.0250						

AMES 11-7X7 OA12 OBA ORBITER FUSELAGE (RBPB29)

MACH (1) = .598 BETA (2) = -3.98

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9450	.6260	.0000	-.4850	-.0320	.0150			.0080		-.0130	-.0180	.0010	.0210	.0380
25.000	.9450		-.1010	-.4190	-.0450	.0110			.0040		-.0280				
45.000	.9450		.0590	-.2720	-.0950	.0060			-.0090		-.0610	-.0430	.0080	.0310	.0570
55.000	.9450		.1130	-.1850	.0020	.0030			.0460		-.0270				
75.000	.9450		.1110	-.1550	.0520	.0860			.0340		-.1850	-.3630	-.1140	-.0330	-.0320
90.000	.9450	.6910	.0420	-.1670	.0890	.0910			.0280		-.1190	-.4420	-.1190	-.0490	-.0720
105.000	.9450														
115.000	.9450														
125.000	.9450		-.0200	-.1010	.1150	.1580			.0550		-.3010	-.3200	-.1200	-.0740	-.0700
135.000	.9450														
142.000	.9450									-.4420					
150.000	.9450		-.0810	-.0890	.1170	.3580			-.1420		-.6180	-.2150	-.1060	-.0620	-.0390
157.000	.9450							.2730							
162.000	.9450								-.2870						
165.000	.9450										-.4470	-.1810	-.1030	-.0450	-.0300
169.000	.9450								-.3930						
172.000	.9450						.5580								
180.000	.9450	.3780	-.2430	-.0840	.0870	.4760			.0420		-.5670	-.1860	-.1520	-.0960	-.0850

X/LB	.5073	.6626	.7580	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0260							-.1860	-.1690	
40.000	.0560	-.0070		-.1480	-.2440	-.4450	-.2450		-.1620	
70.000		-.1590	-.0720	.0530	.2150	.2350	.1890	.0460		
90.000		-.1080	.0000	.1150	.1760	.1390	.0910	-.0210		
105.000				.1740	.1260	.0900	.0410	-.0450		
115.000								-.1260		
125.000		-.0630	.1230	.3460	-.0140	-.0330	-.0130	-.1490	-.1330	
135.000				.2910	-.0370	-.1390	-.0810	-.1180		
150.000		-.0150	.1070	.1290	-.1000	-.1010	-.0710	-.1330		
165.000		-.0090		.1430	.1150	-.0390	-.0780	-.1270		
180.000		-.0320	.0320	.0860						

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AMES 11-7ft OA12 OEA ORBITER FUSELAGE (RBPB29)

MACH (1) = .998 BETA (3) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.00	.9900	.6160	.0000	-.4810	-.0300	.0180			.0040		-.0090	-.0130	.0070	.0240	.0460
20.00	.9900		-.1590	-.4350	-.0310	.0150			.0100		-.0210				
40.00	.9900		-.0620	-.3390	-.0170	.0200			.0070		-.0690	-.0650	-.0280	.0250	.0540
55.00	.9900		-.0420	-.3060	.0010	.0260			-.0130		-.0800				
70.00	.9900		-.0760	-.2860	-.0260	.0240			-.0260		-.1320	-.4090	-.1280	-.0590	-.0470
90.00	.9900	.5520	-.1460	-.2940	.0170	.0280			-.0380		-.1770	-.4700	-.1270	-.0650	-.0680
105.00	.9900														
110.00	.9900														
120.00	.9900		-.1550	-.1940	.0480	.0850			-.0720		-.3210	-.3120	-.1140	-.0590	-.0440
135.00	.9900									-.5030					
142.00	.9900								-.2290		-.5610	-.2010	-.0940	-.0450	-.0250
150.00	.9900		-.1500	-.1140	.0880	.3080		.1780							
157.00	.9900								-.3930						
162.00	.9900										-.4720	-.1760	-.0970	-.0430	-.0210
165.00	.9900								-.4160						
169.00	.9900						.5480								
172.00	.9900								.0210		-.5410	-.1530	-.1050	-.0480	-.0210
180.00	.9900	.3980	-.2230	-.0670	.1040	.4910									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0290							-.1460		-.1610
40.00	.0560	-.0020		-.1420	-.2310	-.4730	-.2840			-.1480
70.00		-.1900	-.1070	-.0020	.1620	.1950	.1680	.0040		
90.000		-.1240	-.0270	.0440	.0980	.0990	.0660	-.0310		
105.00				.0640	.0510	.0500	.0190	-.0550		
110.00									-.1400	
120.00		-.0460	.1150	.1890	-.1270	-.0670	-.0230	-.0540	-.1340	
135.00				.3560	-.0230	-.1490	-.0800	-.1060		
150.00		-.0040	.1310	.2070	-.0130	-.1560	-.1120	-.1400		
165.00		.0020		.1840	.1060	-.1180	-.1240	-.1140		
180.00		.0070	.0080	.0960						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB29)

MACH (1) = .6U0 BETA (4) = 4.16U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9570	.6800	.0000	-.4960	-.0360	.0140			.0030		-.0170	-.0180	-.0030	.0170	.0320
20.000	.9570		-.2220	-.4500	-.0480	.0110			.0070		-.0320				
40.000	.9570		-.1840	-.4000	-.0470	.0060			-.0110		-.1070	-.1050	-.0470	-.0030	.0340
55.000	.9570		-.2080	-.4170	-.0600	-.0290			-.0630		-.1250				
70.000	.9570		-.2600	-.4120	-.0960	-.0280			-.0760		-.1770	-.4280	-.1510	-.0790	-.0560
90.000	.9570	.3960	-.3340	-.4150	-.0520	-.0350			-.1010		-.2140	-.4720	-.1330	-.0640	-.0580
105.000	.9570														
110.000	.9570														
120.000	.9570		-.2990	-.3100	-.0270	-.0010			-.1960		-.3370	-.2990	-.1010	-.0470	-.0370
135.000	.9570														
142.000	.9570									-.5970					
150.000	.9570		-.2340	-.1850	.0310	.2200			-.3240		-.5090	-.1950	-.0920	-.0410	-.0210
157.000	.9570							.0340							
162.000	.9570								-.5360						
165.000	.9570										-.4790	-.1740	-.0920	-.0410	-.0260
169.000	.9570								-.4630						
172.000	.9570						.4930								
180.000	.9570	.3880	-.2300	-.1660	.0900	.4660			.0000		-.5650	-.1740	-.1320	-.0770	-.0450

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0332
PHI										
.000	.0240							-.1970		-.1730
40.000	.0490	-.0030		-.1270	-.2150	-.4760	-.3150			-.1760
70.000		-.1980	-.1390	-.0460	.1030	.1590	.1300	-.0110		
90.000		-.1290	-.0590	-.0260	.0320	.0660	.0450	-.0410		
105.000				-.0300	-.0290	.0130	-.0110	-.0700		
110.000									-.1470	
120.000		-.0480	.0770	.0110	-.2620	-.1010	-.0450	-.0570	-.1140	
135.000				.4030	-.0730	-.2080	-.1190	-.1120		
150.000		-.0070	.1180	.2320	.0110	-.2360	-.1710	-.1680		
165.000		-.0090		.1950	.1060	-.2320	-.1970	-.1150		
180.000		-.0340	.0530	.0890						

AMES 11-7?7 OA12 OEA ORBITER FUSELAGE (RBFB29)

MACH (1) = .397 BETA (5) = 8.25?

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.1???	.0?75	.0188	.0339	.0?82	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3?16	.3953	.5127
PHI															
.???	.9229	.5695	.?????	-.5129	-.?56?	-.?06?			-.?14?		-.?38?	-.?3??	-.?12?	.?42?	.?12?
2?.???	.9229		-.2885	-.4885	-.?59?	-.?11?			-.?12?		-.?56?				
4?.???	.9229		-.3259	-.4769	-.?96?	-.?32?			-.?64?		-.1849	-.1739	-.1?6?	-.?45?	-.?65?
55.???	.9229		-.3909	-.5279	-.124?	-.?87?			-.114?		-.169?				
7?.???	.9229		-.4479	-.5559	-.153?	-.?75?			-.117?		-.2?6?	-.435?	-.16??	-.?88?	-.?62?
9?.???	.9229	.2299	-.5169	-.5559	-.1139	-.?87?			-.153?		-.2419	-.4589	-.128?	-.?62?	-.?68?
1?5.???	.9229														
11?.???	.9229														
12?.???	.9229		-.4559	-.4299	-.1?6?	-.?89?			-.3299		-.3439	-.2979	-.?99?	-.?42?	-.?37?
139.???	.9229														
142.???	.9229									-.?53?					
15?.???	.9229		-.3249	-.2679	-.?43?	.1159			-.4269		-.4839	-.2?8?	-.1?5?	-.?58?	-.?35?
157.???	.9229							-.1359							
162.???	.9229								-.6859						
165.???	.9229										-.4859	-.185?	-.1?5?	-.?89?	-.?67?
169.???	.9229								-.5319						
172.???	.9229						.4???								
18?.???	.9229	.3?68	-.2539	-.1129	.?519	.4?39			-.?59?		-.6?39	-.23??	-.185?	-.276?	-.172?
X/LB	.5873	.6626	.7389	.7869	.8283	.8848	.9262	.9639	1.?????5	1.?392					
PHI															
.???	.?279														
4?.???	.?229	-.?119		-.1189	-.2129	-.4899	-.3569	-.1949		-.1819					
7?.???		-.2?89	-.1799	-.?869	.?699	.1319	.1199	-.?129		-.182?					
9?.???		-.1429	-.?969	-.?759	.?999	.?359	.?239	-.?519							
1?5.???				-.?949	-.?979	-.?239	-.?259	-.?799							
11?.???									-.1329						
12?.???		-.?699	.?549	-.?699	-.3819	-.1449	-.?729	-.?769	-.1399						
139.???				.4?89	-.1119	-.2949	-.1719	-.1499							
15?.???		-.?419	.?829	.2189	-.?589	-.3339	-.2659	-.2189							
165.???		-.?689		.1479	.?479	-.4269	-.3239	-.1619							
18?.???		-.1?89	-.?369	-.?179											

AMES 11-7U7 OA12 OBA ORBITER FUSELAGE (RBPB29)

MACH (2) = .898 BETA (1) = -0.130

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1540	.7150	.0000	-.7250	.0080	.0160			-.0150		-.0700	-.0970	-.0500	.0020	.0560
20.000	1.1540		.0780	-.6410	-.0620	.0010			-.0250		-.0870				
40.000	1.1540		.2710	-.3470	.0040	-.0370			-.0680		-.1500	-.2010	-.0390	.0230	.0830
55.000	1.1540		.3570	-.1530	.1520	.1790			.1340		.0290				
70.000	1.1540		.3630	-.0730	.1570	.2080			.1450		-.0030	-.5910	-.0830	.0130	.0290
90.000	1.1540	.9250	.2940	-.0710	.2050	.2340			.1640		-.0400	-.7330	-.0830	-.0180	-.0280
105.000	1.1540														
110.000	1.1540														
120.000	1.1540		.1730	-.0380	.2170	.3240			.2670		-.2110	-.8470	-.1330	-.0770	-.0610
135.000	1.1540														
142.000	1.1540									-.5070					
150.000	1.1540		.0280	-.0920	.1760	.5190			.1920		-.7100	-.6930	-.1050	-.0550	-.0380
157.000	1.1540							.5260							
162.000	1.1540								.0640						
165.000	1.1540										-.5880	-.5540	-.0980	-.0290	-.0150
169.000	1.1540								-.1450						
172.000	1.1540						.7120								
180.000	1.1540	.5070	-.2340	-.2000	.0920	.5690			.1900		-1.1590	-.4870	-.3430	-.1860	-.1180

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0630							-.4860		-.1850
40.000	.1010	.0460		-.0810	-.1950	-.2180	-.4700			-.2010
70.000		-.2380	-.1260	.1030	.2970	.3350	.2950	.0150		
90.000		-.1960	-.0330	.1880	.2540	.2210	.1750	.0000		
105.000				.2620	.2240	.1750	.1160	-.0320		
110.000									-.2040	
120.000		-.1770	.1100	.4950	.0810	.0230	.0300	-.0630	-.1840	
135.000				.2720	-.0170	-.1370	-.0620	-.1320		
150.000		-.0830	.1120	.0860	-.1500	-.0260	.0240	-.1170		
165.000		-.0600		.1480	.1320	.0470	.0500	-.1950		
180.000		-.1170	.0110	.0350						

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AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBPB29)

MACH (2) = .902 BETA (2) = -4.020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3266	.3953	.5125
PHI															
.000	1.1710	.7520	.0600	-.6080	.0530	.0450			.0150		-.0570	-.0760	-.0320	.0280	.0730
20.000	1.1710		.0580	-.6710	-.0080	.0350			.0110		-.0620				
40.000	1.1710		.1830	-.4880	.0220	.0280			-.0630		-.1020	-.1690	-.0320	.0450	.1120
55.000	1.1710		.2250	-.3410	.1000	.1320			.0790		-.0370				
70.000	1.1710		.2060	-.2540	.0870	.1500			.0820		-.0820	-.6330	-.1260	-.0240	.0090
90.000	1.1710	.8140	.1280	-.2370	.1360	.1740			.0910		-.1220	-.7690	-.1350	-.0190	-.0370
105.000	1.1710														
110.000	1.1710														
120.000	1.1710		.0410	-.1630	.1670	.2710			.1540		-.2820	-.8760	-.1590	-.0330	-.0370
135.000	1.1710									-.7130					
142.000	1.1710														
150.000	1.1710		-.0460	-.1930	.1740	.5040			.1560		-.7020	-.6460	-.0680	-.0140	-.0120
157.000	1.1710							.4820							
162.000	1.1710								.0190						
165.000	1.1710										-.8430	-.4550	-.0990	.0120	-.0610
169.000	1.1710								-.1190						
172.000	1.1710						.7460								
180.000	1.1710	.5390	-.2330	-.1840	.1450	.6210			.2170		-1.2530	-.4250	-.1910	-.0330	-.0510

X/LB	.5873	.6626	.7380	.7659	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0960							-.5340		-.1710
40.000	.1240	.0810		-.0470	-.1540	-.2040	-.3420			-.1820
70.000		-.2620	-.1940	.0380	.2390	.3030	.2760	.1690		
90.000		-.2130	-.0750	.1060	.1750	.1910	.1590	-.0070		
105.000				.1550	.1250	.1370	.0980	-.0460		
110.000									-.1970	
120.000		-.1490	.1000	.3760	-.0520	.0010	.0220	-.0610	-.1670	
135.000				.3710	.0050	-.1090	-.0410	-.1110		
150.000		-.0640	.1150	.1620	-.0700	-.0760	-.0280	-.1310		
165.000		-.0470		.1800	.1310	-.0260	-.0420	-.1480		
180.000		-.0680	.0990	.1110						

AMES 11-7X7 OA12 OBA ORBITER FUSELAGE (BBP829)

MACH (2) = .899 BETA (3) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3214	.3993	.5122
PHI															
.000	1.1660	.7590	.0000	-.5940	.0180	.0430			.0120		-.0510	-.0780	-.0310	.0300	.0760
20.000	1.1660		.0040	-.6110	.0210	.0410			.0120		-.0670				
40.000	1.1660		.0790	-.6060	.0250	.0450			.0150		-.1150	-.1720	-.0550	.0330	.0920
55.000	1.1660		.0810	-.5840	.0490	.0760			.0190		-.1110				
70.000	1.1660		.0450	-.4950	.0290	.0910			.0120		-.1760	-.6690	-.1270	-.0220	-.0440
90.000	1.1660	.6970	-.0390	-.4650	.0730	.1210			.0130		-.2260	-.7950	-.1790	-.0160	-.0330
105.000	1.1660														
110.000	1.1660														
125.000	1.1660		-.0950	-.3760	.1060	.2050			.0240		-.4610	-.9020	-.1240	-.0470	-.0150
135.000	1.1660														
142.000	1.1660									-1.0110					
150.000	1.1660		-.1140	-.2690	.1450	.4550			.0960		-.8420	-.5380	-.0610	.0110	.0000
157.000	1.1660							.3940							
162.000	1.1660								-.0590						
165.000	1.1660										-.9460	-.4830	-.1540	.0310	.0070
169.000	1.1660								-.1160						
172.000	1.1660						.7270								
180.000	1.1660	.5320	-.2270	-.1570	.1590	.6340			.2260		-.6880	-.5820	-.0940	.0110	-.0040

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0930							-.5500		-.1660
40.000	.1200	.0850		-.0370	-.1380	-.2210	-.5410			-.1830
70.000		-.2720	-.2320	-.0480	.1590	.2490	.2360	-.0130		
90.000		-.2000	-.1090	-.0070	.0740	.1490	.1320	-.0290		
105.000				.0030	.0060	.0870	.0690	-.0590		
110.000									-.2130	
125.000		-.1080	.0770	.1450	-.2140	-.0410	.0620	-.0760	-.1900	
135.000				.3670	-.0020	-.1420	-.0650	-.1220		
150.000		-.0500	.1130	.2490	.0210	-.1580	-.1090	-.1670		
165.000		-.0360		.2100	.1340	-.1270	-.1220	-.1460		
180.000		-.0340	.0760	.1300						

AMES 11-7X7 OA12 O2A ORBITER FUSELAGE (RBFB2C)

MACH (2) = .897 BETA (4) = 4.210

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1530	.7420	.0000	-.6130	.0370	.0410			.0110		-.0550	-.0820	-.0310	.0230	.0710
20.000	1.1530		-.0390	-.6210	.0310	.0390			.0120		-.0700				
40.000	1.1530		-.0250	-.6870	.0290	.0440			.0010		-.1460	-.1880	-.0870	.0060	.0750
55.000	1.1530		-.0530	-.7060	.0210	.0280			-.0320		-.1820				
70.000	1.1530		-.1090	-.6340	.0120	.0420			-.0410		-.2680	-.6860	-.1350	-.0410	-.0110
90.000	1.1530	.5630	-.1900	-.5900	.0460	.0540			-.0530		-.3320	-.7940	-.1330	-.0190	-.0200
105.000	1.1530														
110.000	1.1530														
120.000	1.1530		-.2260	-.5270	.0450	.1290			-.0940		-.5330	-.7630	-.1550	.0000	.0030
135.000	1.1530														
142.000	1.1530									-1.1000					
150.000	1.1530		-.1910	-.3630	.0920	.3820			.0170		-.6050	-.5530	-.2640	.0260	.0130
157.000	1.1530							.2710							
162.000	1.1530								-.1620						
165.000	1.1530										-.6300	-.5560	-.2780	.0320	.0050
169.000	1.1530								-.1320						
172.000	1.1530						.6760								
180.000	1.1530	.5270	-.2310	-.1640	.1430	.6150			.2050		-1.2230	-.3890	-.1990	-.0310	-.0490

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0860							-.5270		-.1640
40.000	.1040	.0830		-.0290	-.1250	-.2200	-.5740			-.1940
70.000		-.2540	-.2330	-.1420	.0640	.1750	.1790	-.0410		
90.000		-.1690	-.1200	-.1330	-.0250	.0780	.0780	-.0590		
105.000				-.1240	-.1090	.0250	.0250	-.0900		
110.000									-.2240	
120.000		-.0880	.0360	-.0740	-.3800	-.0920	-.0320	-.0980	-.2090	
135.000				.3490	-.0420	-.2290	-.1210	-.1520		
150.000		-.0370	.0940	.2720	.0690	-.2560	-.1860	-.2000		
165.000		-.0380		.1990	.1350	-.2560	-.2040	-.1530		
180.000		-.0610	.0670	.1110						

AMES 11-7D7 OA12 OBA ORBITER FUSELAGE (RBFB29)

MACH (2) = .896 BETA (5) = 8.340

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0950	.7440	.0400	-.6780	.0240	.0190			-.0050		-.0740	-.0840	-.0430	.0110	.0540
20.000	1.0950		-.0900	-.6770	.0060	.0210			-.0020		-.0880				
40.000	1.0950		-.1270	-.7640	-.0100	.0100			-.0360		-.2190	-.2580	-.1640	-.0390	.0440
55.000	1.0950		-.1880	-.7250	-.0630	-.0170			-.0740		-.2440				
70.000	1.0950		-.2610	-.7430	-.1320	.0030			-.0820		-.3300	-.7290	-.1590	-.0650	-.0190
90.000	1.0950	.4250	-.3310	-.6330	-.1360	.0090			-.1030		-.3950	-.7710	-.1540	-.0270	-.0220
105.000	1.0950														
110.000	1.0950														
120.000	1.0950		-.3410	-.6310	-.0460	.0430			-.2110		-.5270	-.5640	-.2460	.0010	-.0010
135.000	1.0950														
142.000	1.0950									-.9210					
150.000	1.0950		-.2640	-.4450	.0100	.2790			-.0800		-.6960	-.5630	-.3150	.0120	-.0160
157.000	1.0950							.1220							
162.000	1.0950								-.2700						
165.000	1.0950										-.6390	-.5380	-.2990	-.0150	-.0360
169.000	1.0950								-.1640						
172.000	1.0950						.5830								
180.000	1.0950	.4880	-.2320	-.1570	.1000	.5560			.1710		-1.1560	-.4710	-.2900	-.1280	-.1180

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0690							-.4830		-.1790
40.000	.0790	.0680		-.0300	-.1160	-.2220	-.6090			-.2020
70.000		-.2340	-.2430	-.2060	-.0010	.1230	.1350	-.0670		
90.000		-.1650	-.1450	-.1940	-.1030	.0270	.0790	-.0800		
105.000				-.1890	-.2080	-.0270	-.0110	-.1110		
110.000									-.2420	
120.000		-.0890	.0120	-.1190	-.5740	-.1530	-.0730	-.1230	-.2290	
135.000				.4100	-.0230	-.3450	-.2040	-.1860		
150.000		-.0820	.0330	.1390	-.0830	-.4780	-.3840	-.3200		
165.000		-.0820		.1410	.0740	-.4820	-.3930	-.1910		
180.000		-.1070	.0070	.0470						

AMES 11-7X7 OA12 OEA ORBITER FUSELAGE (RBPB30) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 10.000 RUDDER = .000
ELEVON = -20.000 RUDFLR = .000

MACH (1) = .598 BETA (1) = -0.050

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9040	.7560	.0000	-.3130	.0330	.0630			.0530		.0270	.0230	.0460	.0610	.0610
20.000	.9040		.1670	-.2250	.0390	.0720			.0660		.0330				
40.000	.9040		.3400	-.0430	.1230	.1000			.0980		.0350	.0390	.0870	.1050	.1410
55.000	.9040		.3800	.0370	.1850	.1730			.1270		.0360				
70.000	.9040		.3330	.0170	.1240	.1560			.1050		-.0250	-.3380	-.1250	-.0670	-.0790
90.000	.9040	.7790	.1780	-.0630	.1500	.1490			.0960		-.0850	-.4900	-.1770	-.1280	-.1690
105.000	.9040														
110.000	.9040														
125.000	.9040		-.0420	-.1190	.0940	.1650			.1930		-.4070	-.4300	-.2370	-.2080	-.2130
135.000	.9040														
142.500	.9040									-.4590					
150.000	.9040		-.2310	-.1970	.1250	.3200			-.1660		.8170	-.2710	-.1620	-.1240	-.1160
157.000	.9040							.2610							
162.000	.9040								-.3390						
165.000	.9040										-.4770	-.2170	-.1460	-.1080	-.0980
169.000	.9040								-.5440						
172.000	.9040						.4650								
180.000	.9040	.1250	-.4910	-.2630	-.0370	.3640			-.1490		-.6640	-.2590	-.2670	-.3440	-.1500

X/LB	.5873	.6626	.7380	.7869	.8263	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0800							-.1690		-.1640
40.000	.1450	.0940		-.0780	-.1890	-.4240	-.2040			-.1630
70.000		-.2600	-.0980	.0750	.2620	.2900	.2400	.0680		
90.000		-.2040	-.0230	.1560	.2340	.1860	.1290	.0060		
105.000				.2650	.2060	.1330	.0790	-.0200		
110.000									-.1630	
125.000		-.1940	.0490	.4630	.0840	-.0310	-.0370	-.0800	-.1610	
135.000				.0370	-.1920	-.2640	-.1930	-.2240		
150.000		-.0940	.0230	-.0240	-.2570	-.1060	-.0620	-.1500		
165.000		-.0870		.0430	.0340	-.0170	-.0380	-.1700		
180.000		-.1270	-.0440	-.0300						

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBPB30)

MACH (1) = .599 BETA (2) = -3.980

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9450	.8030	.0000	-.2870	.0620	.0850			.0740		.0450	.0410	.0580	.0780	.0940
25.000	.9450		.1470	-.2170	.0640	.0890			.0840		.0430				
40.000	.9450		.2540	-.0980	.1080	.1170			.1010		.0210	.0480	.0610	.0910	.1300
55.000	.9450		.2400	-.0900	.1090	.0880			.0520		-.0320				
75.000	.9450		.1600	-.1230	.0320	.0840			.0370		-.0880	-.4040	-.1750	-.1110	-.1160
90.000	.9450	.6550	.0460	-.2000	.0690	.0800			.0240		-.1450	-.5250	-.2010	-.1490	-.1740
105.000	.9450														
110.000	.9450														
120.000	.9450		-.1800	-.2090	.0500	.1250			.0980		-.4210	-.4130	-.2490	-.1710	-.1660
135.000	.9450														
142.000	.9450									-.5210					
150.000	.9450		-.2950	-.2400	.0310	.3100			-.2330		-.7520	-.2560	-.1440	-.1160	-.1930
157.000	.9450							.2180							
162.000	.9450								-.4080						
165.000	.9450										-.4780	-.2110	-.1260	-.0820	-.0810
169.000	.9450								-.5510						
172.000	.9450						.4950								
180.000	.9450	.1390	-.4770	-.1850	.0000	.4150			-.1220		-.5860	-.1950	-.1550	-.1410	-.1520

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
.000	.0990							-.1630		-.1620
40.000	.1450	.1000		-.0610	-.1760	-.4380	-.2420			-.1570
70.000		-.3190	-.1740	-.0070	.1840	.2400	.2140	.0560		
90.000		-.2320	-.0650	.0600	.1600	.1410	.0990	-.0020		
105.000				.1750	.1220	.0910	.0460	-.0350		
110.000									-.1380	
120.000		-.1800	.0630	.3670	-.0110	-.0540	-.0410	-.0650	-.1440	
135.000				.1620	-.1260	-.2100	-.1390	-.1520		
150.000		-.0800	.0530	.0580	-.1740	-.1350	-.0880	-.1420		
165.000		-.0810		.0750	.0490	-.0880	-.0950	-.1170		
180.000		-.0630	.0270	.0460						

AMES 11-7?7 OA12 OEA ORBITER FUSELAGE (RBPB3U)

MACH (1) = .990 BETA (3) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.9230	.8090	.0000	-.2870	.0630	.0950			.0740		.0500	.0460	.0630	.0820	.1040
20.000	.9230		.0880	-.2340	.0680	.0990			.0790		.0370				
40.000	.9230		.1300	-.1750	.0650	.0940			.0690		-.0420	-.0570	.0110	.0590	.1050
55.000	.9230		.0730	-.2220	.0180	.0070			-.0250		-.0920				
70.000	.9230		-.0290	-.2650	-.0630	.0180			-.0290		-.1450	-.4450	-.2560	-.1410	-.1380
90.000	.9230	.5220	-.1830	-.3210	-.0010	.0240			-.0400		-.2010	-.5380	-.2560	-.1460	-.1650
105.000	.9230														
110.000	.9230														
125.000	.9230		-.3030	-.2850	.0090	.0750			-.0160		-.4270	-.3750	-.1740	-.1220	-.1180
135.000	.9230														
142.000	.9230									-.5690					
150.000	.9230		-.3500	-.2770	.0190	.2750			-.2970		-.6730	-.2320	-.1210	-.0790	-.0780
157.000	.9230							.1410							
162.000	.9230								-.4990						
165.000	.9230										-.5030	-.1970	-.1120	-.0680	-.0540
169.000	.9230								-.5690						
172.000	.9230						.4910								
180.000	.9230	.1630	-.4520	-.1730	.0190	.4330			-.1960		-.5590	-.1640	-.1190	-.0860	-.1470

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1050							-.1800		-.1570
40.000	.1310	.0950		-.0550	-.1620	-.4590	-.2810			-.1610
70.000		-.3460	-.2150	-.0750	.1240	.1920	.1970	.0440		
90.000		-.2370	-.1120	-.0100	.0620	.0870	.0770	-.0110		
105.000				.0230	.0340	.0410	.0240	-.0510		
110.000									-.1490	
120.000		-.1210	.0780	.2140	-.1300	-.0890	-.0390	-.0680	-.1420	
135.000				.2680	-.0810	-.1840	-.1080	-.1310		
150.000		-.0710	.0680	.1790	-.0630	-.1700	-.1290	-.1390		
165.000		-.0500		.1130	.0980	-.1510	-.1310	-.1140		
180.000		-.0340	.0470	.0900						

AMES 11-7D7 OA12 OEA ORBITER FUSELAGE (RBPB3D)

MACH (1) = .398 BETA (4) = 4.150

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	.8980	.7780	.0000	-.2880	.0390	.0810			.0690		.0430	.0450	.0650	.0780	.0990
20.000	.8980		.0270	-.2700	.0510	.0750			.0650		.0240				
40.000	.8980		-.0480	-.2690	.0120	.0410			.0060		-.1360	-.1470	-.0650	.0060	.0780
55.000	.8980		-.1010	-.3550	-.0730	-.0780			-.0980		-.1580				
70.000	.8980		-.2260	-.4010	-.1430	-.0390			-.0840		-.1890	-.4740	-.2250	-.1700	-.1590
90.000	.8980	.3990	-.3790	-.4470	-.0630	-.0290			-.0890		-.2320	-.5490	-.1970	-.1410	-.1560
105.000	.8980														
110.000	.8980														
125.000	.8980		-.4450	-.4010	-.0420	.0150			-.1300		-.4170	-.3420	-.1450	-.0920	-.0900
135.000	.8980														
142.000	.8980									-.6190					
150.000	.8980		-.4240	-.3470	-.0140	.2120			-.3850		-.5930	-.2040	-.0980	-.0590	-.0560
157.000	.8980							.0230							
162.000	.8980								-.6370						
165.000	.8980										-.5070	-.1800	-.1010	-.0560	-.0490
169.000	.8980								-.6110						
172.000	.8980						.4400								
180.000	.8980	.1710	-.4480	-.2090	.0140	.4180			-.1220		-.5750	-.1840	-.1400	-.1080	-.1030

X/LB	.5073	.6020	.7380	.7880	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
.000	.0970							-.1630	-.1600	
40.000	.1140	.0850		-.0480	-.1510	-.4840	-.5270		-.1700	
70.000		-.3400	-.2330	-.1080	.0510	.1450	.1570	.0220		
90.000		-.2450	-.1290	-.1000	-.0280	.0450	.0520	-.0270		
105.000				-.1050	-.0640	-.0010	-.0050	-.0710		
110.000									-.1630	
125.000		-.1280	.0160	-.0290	-.2440	-.1130	-.0530	-.0660	-.1490	
135.000				.3370	-.0840	-.2130	-.1290	-.1350		
150.000		-.0590	.0780	.2520	-.0500	-.2330	-.1830	-.1880		
165.000		-.0490		.1530	.0990	-.2390	-.1930	-.1220		
180.000		-.0800	.0300	.0520						

AMES 11-7ft OA12 OEA ORBITER FUSELAGE (RBP830)

MACH (1) = .398 BETA (5) = 0.230

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	.8770	.7640	.0650	-.3020	.0350	.0620			.0510		.0240	.0310	.0400	.0620	.0790
20.000	.8770		-.0510	-.3110	.0170	.0440			.0380		-.0060				
40.000	.8770		-.1430	-.3610	-.0680	-.0400			-.0810		-.2540	-.2620	-.1640	-.0570	.0260
55.000	.8770		-.2750	-.4760	-.1550	-.1560			-.1620		-.2160				
70.000	.8770		-.4060	-.5310	-.2060	-.0870			-.1270		-.2260	-.4930	-.2400	-.1890	-.1680
90.000	.8770	.2080	-.5530	-.5760	-.1100	-.0740			-.1380		-.2610	-.5390	-.1900	-.1360	-.1530
105.000	.8770														
110.000	.8770														
120.000	.8770		-.5780	-.5070	-.0980	-.0470			-.2340		-.4070	-.3210	-.1260	-.0840	-.0870
135.000	.8770														
142.000	.8770									-.0180					
150.000	.8770		-.5030	-.4130	-.0740	.1180			-.4720		-.5320	-.2040	-.1000	-.0640	-.0670
157.000	.8770							-.1240							
162.000	.8770								-.7820						
165.000	.8770										-.5160	-.1840	-.1050	-.0730	-.0800
169.000	.8770								-.6650						
172.000	.8770						.3510								
180.000	.8770	.1480	-.4710	-.2560	-.0340	.3520			-.1730		-.6320	-.2400	-.2300	-.3390	-.1550

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0800							-.1660		-.1700
40.000	.0660	.0640		-.0500	-.1470	-.4730	-.3790			-.1860
70.000		-.3450	-.2570	-.1520	.0050	.1140	.1470	.0300		
90.000		-.2630	-.1920	-.1640	-.0610	.0140	.0280	-.0350		
105.000				-.1670	-.1380	-.0440	-.0310	-.0790		
110.000									-.1530	
120.000		-.1530	.0000	-.0870	-.3980	-.1620	-.0840	-.0620	-.1400	
135.000				.3920	-.1070	-.2800	-.1700	-.1490		
150.000		-.0830	.0090	.1720	-.1460	-.3880	-.3060	-.2570		
165.000		-.0900		.1160	.0180	-.4140	-.3200	-.1590		
180.000		-.1240	-.0480	-.0490						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB3U)

MACH (2) = .9U1 BETA (1) = -8.16U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.1130	.8880	.0000	-.4540	.0730	.1110			.0850		.0330	.0080	.0250	.0720	.1410
20.000	1.1130		.3080	-.3040	.0750	.1190			.0990		.0350				
40.000	1.1130		.4550	-.0560	.1710	.1580			.1320		.0480	-.0110	.0510	.1290	.1960
55.000	1.1130		.4800	.0180	.2310	.2330			.1930		.0860				
70.000	1.1130		.4180	.0050	.1610	.2300			.1870		.0320	-.5540	-.2430	-.0450	-.0140
90.000	1.1130	.8980	.2620	-.1030	.1880	.2380			.2000		-.0310	-.7130	-.2670	-.1030	-.1140
105.000	1.1130														
110.000	1.1130														
120.000	1.1130		.0120	-.1850	.1380	.2870			.3410		-.3500	-.8880	-.3150	-.1680	-.1680
135.000	1.1130														
142.000	1.1130									-.5040					
150.000	1.1130		-.1810	-.4020	.0800	.4740			.1270		-.8100	-.7580	-.2910	-.0720	-.0830
157.000	1.1130							.4840							
162.000	1.1130								.0000						
165.000	1.1130										-.6320	-.6100	-.2830	-.0330	-.0700
169.000	1.1130								-.2540						
172.000	1.1130						.6620								
180.000	1.1130	.3140	-.4550	-.4620	.0300	.5210			.0930		-1.0620	-.5780	-.3730	-.1610	-.1570

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1590							-.4310		-.1750
40.000	.2290	.2060		.0490	-.0670	-.1390	-.4330			-.1810
70.000		-.3780	-.6450	-.0560	.1860	.2720	.2540	.0060		
90.000		-.3180	-.5280	.1090	.1320	.1710	.1410	-.0060		
105.000				.1420	.1430	.0990	.0710	-.0410		
110.000									-.1910	
120.000		-.3610	-.0720	.4780	.0140	-.0600	-.0120	-.0730	-.1710	
135.000				.1760	-.1180	-.2240	-.1370	-.1790		
150.000		-.2230	.0060	.0070	-.2570	-.0910	-.0290	-.1400		
165.000		-.2010		.0600	.0320	-.0350	-.0130	-.1920		
180.000		-.1910	-.0520	.0060						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBPB30)

MACH (2) = .901 BETA (2) = -4.040

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1946	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1110	.9270	.0000	-.4090	.1030	.1310			.1090		.0510	.0200	.0340	.0970	.1580
25.000	1.1110		.2790	-.3330	.1050	.1340			.1250		.0450				
40.000	1.1110		.3610	-.1630	.1480	.1690			.1460		.0270	-.0390	.0150	.1130	.1870
55.000	1.1110		.3460	-.1430	.1480	.1560			.1270		.0140				
70.000	1.1110		.2600	-.1790	.0710	.1640			.1240		-.0450	-.6120	-.3960	-.0850	-.0500
90.000	1.1110	.7920	.0950	-.2730	.1230	.1800			.1370		-.1150	-.7610	-.3230	-.1090	-.1090
105.000	1.1110														
110.000	1.1110								.2420		-.4090	-.9040	-.3410	-.1120	-.1190
120.000	1.1110		-.1150	-.3640	.1140	.2550									
135.000	1.1110									-.6750					
142.000	1.1110								.1030		-.8230	-.6470	-.2670	-.0290	-.0530
150.000	1.1110		-.2520	-.5380	.1010	.4690		.4540							
157.000	1.1110								-.0360						
162.000	1.1110										-.8150	-.4870	-.2770	.0260	-.0420
165.000	1.1110								-.2190						
169.000	1.1110						.6690								
172.000	1.1110								.1190		-.9990	-.4900	-.2260	-.0650	-.0520
180.000	1.1110	.3310	-.4590	-.5360	.0840	.5630									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1830							-.4900		-.1700
40.000	.2310	.2200		.0720	-.0370	-.1320	-.4900			-.1730
70.000		-.3840	-.6740	-.1850	.0760	.2090	.2390	.0170		
90.000		-.3180	-.5370	-.0090	.0060	.1230	.1120	-.0160		
105.000				.0130	.0090	.0450	.0450	-.0550		
110.000									-.1910	
120.000		-.3040	-.0950	.3460	-.1450	-.0880	-.0250	-.0770	-.1740	
135.000				.2860	-.0900	-.2050	-.1160	-.1500		
150.000		-.1920	-.0070	.0400	-.1610	-.1610	-.0830	-.1560		
165.000		-.1810		.0900	.0190	-.1360	-.1120	-.1710		
180.000		-.1580	-.0900	.0220						

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBPB50)

MACH (2) = .903 BETA (3) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3296	.3953	.5125
PHI															
.000	1.1420	.9270	.0000	-.3940	.1140	.1350			.1070		.0510	.0250	.0410	.1000	.1610
20.000	1.1420		.2290	-.3740	.1080	.1340			.1120		.0490				
40.000	1.1420		.2490	-.2910	.1070	.1480			.1150		-.0250	-.0830	-.0410	.0910	.1640
55.000	1.1420		.1970	-.3420	.0610	.0790			.0490		-.0660				
70.000	1.1420		.0940	-.4090	-.0070	.1050			.0570		-.1260	-.6610	-.4290	-.1050	-.0770
90.000	1.1420	.6700	-.0670	-.4830	.0680	.1310			.0710		-.1990	-.8130	-.2380	-.0970	-.1020
105.000	1.1420														
110.000	1.1420														
120.000	1.1420		-.2400	-.4970	.0890	.2170			.1270		-.4900	-.9370	-.3080	-.0440	-.0590
135.000	1.1420														
142.000	1.1420									-.8340					
150.000	1.1420		-.3160	-.5040	.1060	.4340			.0570		-.8850	-.6480	-.1830	.0070	-.0340
157.000	1.1420							.3900							
162.000	1.1420								-.1090						
165.000	1.1420										-.8780	-.5060	-.2320	.0320	-.0120
169.000	1.1420								-.2070						
172.000	1.1420						.6660								
180.000	1.1420	.3540	-.4540	-.5120	.1050	.4790			.1270		-.7220	-.6060	-.1230	.0080	-.0190

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1880							-.5080		-.1590
40.000	.2100	.2130		.0820	-.0210	-.1370	-.5250			-.1780
70.000		-.4330	-.6600	-.2560	-.0710	.1250	.2300	.0240		
90.000		-.3220	-.4680	-.1560	-.1840	.0250	.0780	-.0250		
105.000				-.1470	-.2050	-.0410	.0140	-.0730		
110.000									-.2130	
120.000		-.2390	-.0530	.1520	-.3500	-.1380	-.0400	-.0870	-.1950	
135.000				.2250	-.0930	-.2060	-.1170	-.1470		
150.000		-.1690	-.0190	.1770	-.0790	-.2390	-.1640	-.1930		
165.000		-.1470		.1140	.0540	-.2250	-.1770	-.1590		
180.000		-.1270	-.0260	.0400						

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBPB30)

MACH (2) = .952 BETA (4) = 4.190

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1230	.9230	.0000	-.4150	.1040	.1270			.1100		.0480	.0200	.0350	.0960	.1550
20.000	1.1230		.1700	-.4130	.0920	.1180			.1040		.0230				
40.000	1.1230		.1340	-.4630	.0480	.0980			.0650		-.1190	-.1620	-.1420	.0260	.1320
55.000	1.1230		.0460	-.5870	-.0170	.0000			-.0160		-.1470				
70.000	1.1230		-.0680	-.6240	-.0720	.0540			.0050		-.2060	-.7010	-.4040	-.1410	-.0990
90.000	1.1230	.5380	-.2200	-.6090	.0490	.0870			.0120		-.2780	-.8320	-.2590	-.0980	-.0920
105.000	1.1230														
110.000	1.1230														
120.000	1.1230		-.3530	-.5700	.0710	.1640			.0120		-.5200	-.8790	-.1960	-.0330	-.0410
135.000	1.1230														
142.000	1.1230									-.9710					
150.000	1.1230		-.3780	-.5420	.0820	.3810			-.0090		-.6090	-.5500	-.2780	.0110	-.0140
157.000	1.1230							.2870							
162.000	1.1230								-.2000						
165.000	1.1230										-.6020	-.5800	-.2690	.0360	-.0040
169.000	1.1230								-.2150						
172.000	1.1230						.6310								
180.000	1.1230	.3520	-.4560	-.5160	.0870	.5650			.1140		-1.1350	-.4710	-.2320	-.0510	-.0530

X/LB	.5873	.6626	.7360	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1840							-.4780		-.1630
40.000	.1820	.1950		.0680	-.0140	-.1380	-.5830			-.1960
70.000		-.4110	-.5810	-.2990	-.1640	.0630	.1450	-.0250		
90.000		-.3100	-.3890	-.2940	-.3190	-.0330	.0310	-.0540		
105.000				-.2770	-.3690	-.0840	-.0280	-.0980		
110.000									-.2530	
120.000		-.2050	-.1230	-.1790	-.5190	-.1780	-.0860	-.1180	-.2240	
135.000				.2510	-.1190	-.2900	-.1760	-.1750		
150.000		-.1480	-.0250	.2080	-.0100	-.3810	-.2380	-.2210		
165.000		-.1300		.1250	.0720	-.3340	-.2520	-.1770		
180.000		-.1500	-.0450	.0230						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7D7 OA12 OEA ORBITER FUSELAGE (RBPB3D)

MACH (2) = .905 BETA (5) = 8.32D

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0950	.8910	.0000	-.4520	.0850	.1100			.0910		.0290	.0090	.0280	.0750	.1390
20.000	1.0950		.1130	-.4510	.0560	.0950			.0780		.0020				
40.000	1.0950		.0240	-.5650	-.0260	.0310			-.0250		-.2250	-.2590	-.2310	-.0530	.0840
55.000	1.0950		-.0860	-.7110	-.1290	-.0590			-.0760		-.2090				
70.000	1.0950		-.2160	-.6640	-.1830	.0190			-.0400		-.2580	-.7075	-.3800	-.1660	-.1150
90.000	1.0950	.4100	-.3500	-.6260	-.1690	.0500			-.0370		-.3260	-.8460	-.2470	-.0950	-.0910
105.000	1.0950														
110.000	1.0950														
120.000	1.0950		-.4570	-.6070	-.0480	.1080			-.0830		-.4960	-.6820	-.2540	-.0570	-.0400
135.000	1.0950														
142.000	1.0950									-.8170					
150.000	1.0950		-.4430	-.6220	.0090	.3080			-.0850		-.7430	-.5810	-.3390	-.0610	-.0190
157.000	1.0950							.1560							
162.000	1.0950								-.2970						
165.000	1.0950										-.6140	-.5710	-.2940	-.0100	-.0250
169.000	1.0950								-.2360						
172.000	1.0950						.5610								
180.000	1.0950	.3400	-.4600	-.5120	.0340	.5170			.0830		-1.1020	-.5100	-.3570	-.1450	-.1010

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1640							-.4260		-.1730
40.000	.1380	.1590		.0780	-.0080	-.1430	-.6180			-.2030
70.000		-.3790	-.5300	-.3990	-.1960	.0240	.1150	-.0440		
90.000		-.3100	-.3960	-.3970	-.3720	-.0820	-.0010	-.0740		
105.000				-.3520	-.4690	-.1390	-.0630	-.1210		
110.000									-.2640	
120.000		-.2040	-.1240	-.2300	-.6120	-.2650	-.1170	-.1420	-.2550	
135.000				.3190	-.0600	-.6230	-.2150	-.1970		
150.000		-.1440	-.0330	.1340	-.1150	-.5250	-.3780	-.2990		
165.000		-.1480		.0930	.0150	-.4840	-.4250	-.1940		
180.000		-.1910	-.0580	-.0040						

DATE 17 SEP 75 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBPB31) (01 MAY 75)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 15.000 RUDDER = .000
ELEVON = -20.000 RUDFLR = .000

MACH (1) = .600 BETA (1) = -8.040

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.8140	.9190	.4000	-.1110	.1420	.1520			.1340		.1090	.1060	.1230	.1430	.1680
25.000	.8140		.3960	-.0080	.1540	.1730			.1620		.1240				
40.000	.8140		.5020	.1390	.2440	.2290			.2120		.1300	.1030	.1620	.1980	.2320
55.000	.8140		.5000	.1200	.2000	.1370			.1080		.0310				
70.000	.8140		.3450	.0150	.0740	.1310			.0880		-.0460	-.3840	-.2090	-.1610	-.1930
90.000	.8140	.7030	.1040	-.1330	.0880	.0970			.0640		-.1350	-.5850	-.2940	-.2550	-.2640
105.000	.8140														
110.000	.8140														
120.000	.8140		-.2310	-.2590	-.0170	.0870			.2000		-.5740	-.5620	-.3640	-.3340	-.3240
135.000	.8140									-.5520					
142.000	.8140								-.2670		-.9740	-.3110	-.2090	-.1760	-.1870
150.000	.8140		-.4520	-.3710	-.0720	.2530		.1870							
157.000	.8140								-.4510						
162.000	.8140										-.5310	-.2570	-.1830	-.1790	-.1810
165.000	.8140								-.6950						
169.000	.8140						.4030								
172.000	.8140								-.2580		-.6570	-.2560	-.3350	-.2620	-.1440
180.000	.8140	-.0580	-.7060	-.2460	-.1000	.3190									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1670							-.1420		-.1550
40.000	.2500	.2150		.0140	-.1130	-.4050	-.1930			-.1540
70.000		-.5550	-.3570	-.1700	.0650	.1530	.2280	.1270		
90.000		-.3020	-.1300	.0070	.1000	.1100	.0980	.0160		
105.000				.2060	.0990	.0750	.0450	-.0360		
110.000									-.1850	
120.000		-.2880	-.0140	.4220	.0550	-.0540	-.0370	-.0610	-.1340	
135.000				-.0310	-.2700	-.3450	-.2510	-.2630		
150.000		-.1810	-.0330	-.0620	-.3150	-.1510	-.0930	-.1700		
165.000		-.1690		-.0161	-.0210	-.0710	-.0720	-.1890		
180.000		-.1300	-.0320	-.0580						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 OEA ORBITER FUSELAGE (RBPB31)

MACH (1) = .598 BETA (2) = -3.98

SECTION : 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1353	.1906	.1581	.1732	.1958	.2259	.2711	.3290	.3953	.5120
PHI															
.000	.8540	.9530	.6000	-.0820	.1710	.1730			.1580		.1230	.1250	.1410	.1570	.1830
20.000	.8540		.3810	-.0690	.1770	.1850			.1740		.1320				
40.000	.8540		.4110	.0630	.2010	.2020			.1710		.0530	.0170	.0960	.1590	.2110
55.000	.8540		.3440	-.0160	.1660	.0330			.0110		-.0620				
75.000	.8540		.1710	-.1330	-.0360	.0500			.0110		-.1130	-.4600	-.2700	-.2150	-.2590
90.000	.8540	.5780	-.0740	-.2610	.0640	.0380			-.0020		-.1930	-.6290	-.3170	-.2720	-.2690
105.000	.8540														
110.000	.8540														
120.000	.8540		-.3660	-.3310	-.0340	.0670			.1130		-.5780	-.5170	-.3110	-.2770	-.2590
135.000	.8540									-.5930					
142.000	.8540								-.3210		-.8880	-.2800	-.1840	-.1470	-.1460
150.000	.8540		-.5020	-.4220	-.0540	.2630		.1640							
157.000	.8540								-.5140						
162.000	.8540										-.5080	-.2260	-.1840	-.1620	-.1430
165.000	.8540								-.6880						
169.000	.8540						.4310								
172.000	.8540								-.2250		-.5860	-.1880	-.1480	-.1560	-.0980
180.000	.8540	-.0710	-.6960	-.2390	-.0590	.3670									

X/LB	.5973	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1860							-.1410	-.1410	
4.000	.2350	.2110		.0260	-.1020	-.4240	-.2470		-.1520	
7.000		-.5530	-.3780	-.2080	.0070	.0890	.2460	.1230		
9.000		-.3610	-.2180	-.1560	-.0100	.0290	.0500	-.0060		
105.000				.0630	-.0170	-.0070	.0000	-.0570		
110.000									-.1720	
120.000		-.2370	.0150	.2970	-.0710	-.0960	-.0490	-.0590	-.1340	
135.000				.1480	-.1750	-.2670	-.1810	-.1970		
150.000		.1420	.0060	.0100	-.1990	-.1780	-.1170	-.1620		
165.000		-.1390		.0270	.0190	-.1540	-.1410	-.1600		
180.000		-.0770	.0060	.0080						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBPB31)

MACH (1) = .990 BETA (3) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.8650	.9360	.0000	-.0890	.1710	.1750			.1630		.1290	.1250	.1450	.1620	.1650
20.000	.8650		.3170	-.0440	.1780	.1710			.1610		.1210				
40.000	.8650		.2850	-.0350	.1330	.1370			.0990		-.0570	-.0920	.0060	.0930	.1680
55.000	.8650		.1640	-.1680	.0010	-.0710			-.0850		-.1370				
70.000	.8650		-.0150	-.2760	-.1430	-.0120			-.0510		-.1750	-.5090	-.3010	-.2490	-.2980
90.000	.8650	.4510	-.2550	-.3810	-.0480	-.0120			-.0550		-.2330	-.6430	-.3130	-.2590	-.2610
105.000	.8650														
110.000	.8650														
120.000	.8650		-.4650	-.4050	-.0530	.0430			.0230		-.5540	-.4590	-.2530	-.2090	-.1910
135.000	.8650														
142.000	.8650									-.6280					
150.000	.8650		-.5440	-.4460	-.0420	.2480			-.3700		-.7740	-.2550	-.1530	-.1300	-.1500
157.000	.8650							.1100							
162.000	.8650								-.5940						
165.000	.8650										-.5180	-.2180	-.1620	-.0710	-.0810
169.000	.8650								-.6930						
172.000	.8650						.4330								
180.000	.8650	-.0220	-.6610	-.2320	-.0390	.3870			-.2060		-.5570	-.1680	-.1120	-.0730	-.0640

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1880							-.1420		-.1520
40.000	.2540	.1930		.0280	-.0990	-.4360	-.2970			-.1670
70.000		-.5290	-.3900	-.2480	-.0470	.0710	.1850	.0910		
90.000		-.3940	-.2630	-.2010	-.1270	-.0150	.0250	-.0260		
105.000				-.1420	-.0990	-.0570	-.0340	-.0790		
110.000									-.1690	
120.000		-.1880	.0150	.0990	-.2160	-.1380	-.0709	-.0770	-.1460	
135.000				.2460	-.1310	-.2199	-.1410	-.1530		
150.000		-.1750	-.0330	.2000	-.1620	-.2360	-.1830	-.1860		
165.000		-.0880		.0790	.1250	-.1940	-.1750	-.1590		
180.000		-.0680	.0150	.0210						

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBPB31)

MACH (1) = .599 BETA (4) = 4.170

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.8590	.9330	.3000	-.0990	.1630	.1660			.1510		.1220	.1170	.1360	.1580	.1740
20.000	.8590		.2430	-.0820	.1440	.1490			.1370		.0940				
40.000	.8590		.1390	-.1430	.0480	.0440			-.0140		-.2000	-.2320	-.1100	.0690	.1190
55.000	.8590		-.0170	-.3170	-.1190	-.1840			-.1780		-.2210				
70.000	.8590		-.2160	-.4290	-.2330	-.0780			-.1070		-.2300	-.5390	-.3290	-.2820	-.3270
90.000	.8590	.2910	-.4470	-.5010	-.1070	-.0530			-.1090		-.2740	-.6380	-.3030	-.2400	-.2580
105.000	.8590														
110.000	.8590														
120.000	.8590		-.5940	-.5090	-.0800	.0090			-.0770		-.5250	-.4070	-.2010	-.1530	-.1540
135.000	.8590														
142.000	.8590									-.6570					
150.000	.8590		-.6100	-.4800	-.0590	.2010			-.4370		-.6800	-.2230	-.1170	-.0870	-.1040
157.000	.8590							.0100							
162.000	.8590								-.7150						
165.000	.8590										-.5320	-.1950	-.1340	-.0690	-.0750
169.000	.8590								-.7350						
172.000	.8590						.3870								
180.000	.8590	-.0110	-.6590	-.2360	-.0570	.3660			-.2320		-.5770	-.1830	-.1540	-.1420	-.1000

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1770							-.1390		-.1480
40.000	.1640	.1670		.0250	-.0960	-.4410	-.3460			-.1780
70.000		-.5380	-.3720	-.2460	-.0650	.0780	.1500	.0530		
90.000		-.4180	-.3020	-.2810	-.1500	-.0290	.0210	-.0310		
105.000				-.2470	-.1690	-.0690	-.0330	-.0840		
110.000									-.1770	
120.000		-.2020	-.0580	-.1620	-.3260	-.1560	-.0780	-.0800	-.1530	
135.000				.2670	-.0890	-.2370	-.1470	-.1500		
150.000		-.1110	.0440	.2820	-.0830	-.2730	-.2040	-.1990		
165.000		-.0850		.1430	.0860	-.2740	-.2140	-.1380		
180.000		-.0780	.0080	.0210						

AMES 11-707 OA12 CEA ORBITER FUSELAGE (RBPB31)

MACH (1) = .397 BETA (5) = 8.240

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.8540	.9070	.0000	-.1060	.1460	.1510			.1350		.1050	.1080	.1190	.1410	.1640
20.000	.8540		.1740	-.1250	.1040	.1170			.1030		.0570				
40.000	.8540		.0100	-.2410	-.0490	-.0650			-.1490		-.3690	-.3890	-.2470	-.0760	.0590
55.000	.8540		-.1520	-.4470	-.2300	-.2810			-.2600		-.3040				
70.000	.8540		-.4050	-.5500	-.3030	-.1280			-.1550		-.2680	-.5650	-.3510	-.3120	-.3530
90.000	.8540	.1350	-.6190	-.6180	-.1500	-.0900			-.1420		-.2960	-.6280	-.2820	-.2290	-.2630
105.000	.8540														
110.000	.8540														
120.000	.8540		-.7170	-.6150	-.1120	-.0300			-.1540		-.5000	-.3610	-.1710	-.1380	-.1710
135.000	.8540														
142.000	.8540									-.7230					
150.000	.8540		-.6840	-.5320	-.0980	.1290			-.5130		-.6020	-.2040	-.1010	-.0720	-.0920
157.000	.8540							-.1130							
162.000	.8540								-.8510						
163.000	.8540										-.5300	-.1860	-.1120	-.0790	-.1010
169.000	.8540								-.7790						
172.000	.8540						.3170								
180.000	.8540	-.0390	-.6860	-.2830	-.0910	.3080			-.2800		-.6300	-.2340	-.3020	-.2890	-.1900

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1660							-.1380		-.1580
40.000	.1180	.1320		.0260	-.0860	-.4410	-.4000			-.1780
70.000		-.5180	-.3830	-.2740	-.0920	.0410	.1510	.0890		
90.000		-.4380	-.3640	-.3470	-.2000	-.0630	-.0020	-.0310		
105.000				-.3480	-.2270	-.1130	-.0690	-.0970		
110.000									-.1910	
120.000		-.2750	-.0820	-.1960	-.5030	-.2200	-.1080	-.1010	-.1540	
135.000				.3710	-.1260	-.3030	-.1960	-.1700		
150.000		-. 240	.0140	.1820	-.1770	-.3925	-.2980	-.2590		
165.000		-.1250		.1010	.0110	-.4010	-.3210	-.1760		
180.000		-.1280	-.0480	-.0520						

AMES 11-7X7 OA12 O2A ORBITER FUSELAGE (RBPB31)

MACH (2) = .898 BETA (1) = -8.130

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.0360	1.0140	.0000	-.1520	.1780	.1930			.1730		.1320	.1030	.1210	.1490	.2210
20.000	1.0360		.4970	-.0300	.2070	.2170			.2000		.1440				
40.000	1.0360		.5950	.1320	.2800	.2810			.2600		.1600	.0960	.1490	.2040	.2900
55.000	1.0360		.5690	.1250	.2470	.2200			.1970		.1150				
75.000	1.0360		.4440	.0260	.1130	.2200			.1930		.0520	-.5350	-.3460	-.1320	-.1080
90.000	1.0360	.8440	.2150	-.1580	.1330	.2050			.1970		-.0350	-.7170	-.4890	-.2170	-.1630
105.000	1.0360														
110.000	1.0360														
125.000	1.0360		-.1280	-.3380	.0420	.2270			.3790		-.4160	-.9230	-.5080	-.2760	-.2460
135.000	1.0360														
142.000	1.0360									-.5150					
150.000	1.0360		-.3480	-.6240	.0000	.4320			.0680		-.9210	-.6050	-.4380	-.1210	-.1270
157.000	1.0360							.4420							
162.000	1.0360								-.0520						
165.000	1.0360										-.6480	-.4640	-.4190	-.0880	-.1350
169.000	1.0360								-.3220						
172.000	1.0360						.6170								
180.000	1.0360	.1550	-.6280	-.6780	-.0140	.4790			.0160		-1.0680	-.6380	-.3980	-.0815	-.0960

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2450							-.4210		-.1920
40.000	.3260	.3160		.1440	.0240	-.0990	-.5180			-.1700
75.000		-.6180	-.8870	-.5500	-.2880	-.1590	.0550	-.0180		
90.000		-.3950	-.6030	-.0440	-.2240	-.3030	-.0810	-.0950		
105.000				.1520	-.1510	-.3100	-.1140	-.1200		
110.000									-.2260	
125.000		-.4550	-.1030	.4760	-.0860	-.3980	-.0830	-.0780	-.1500	
135.000				.0790	-.2300	-.7640	-.1500	-.1950		
150.000		-.2880	-.0510	-.0340	-.3290	-.2670	-.0890	-.1740		
165.000		-.2700		-.0010	-.0490	-.2240	-.1100	-.2130		
180.000		-.2180	-.0870	-.0440						

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBPB31)

MACH (2) = .901 BETA (2) = -4.020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1906	.1581	.1732	.1930	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0550	1.0380	.0000	-.1140	.2060	.2280			.2010		.1490	.1310	.1430	.1810	.2420
20.000	1.0550		.4740	-.0320	.2200	.2330			.2150		.1550				
40.000	1.0550		.4990	.0500	.2370	.2630			.2330		.1020	.0530	.0910	.1780	.2750
55.000	1.0550		.4360	-.0310	.1560	.1270			.1140		.0290				
75.000	1.0550		.2870	-.1420	.0060	.1520			.1310		-.0250	-.5820	-.4350	-.1630	-.1780
90.000	1.0550	.7390	.0580	-.3410	.0720	.1580			.1490		-.1090	-.7570	-.5980	-.2140	-.1650
105.000	1.0550														
110.000	1.0550														
120.000	1.0550		-.2540	-.5090	.0420	.2210			.2940		-.4670	-.9440	-.3990	-.1810	-.1630
135.000	1.0550														
142.000	1.0550									-.6800					
150.000	1.0550		-.4150	-.6360	.0570	.4410			.0550		-.9080	-.5490	-.4000	-.1040	-.0920
157.000	1.0550							.4280							
162.000	1.0550								-.0830						
165.000	1.0550										-.8070	-.3830	-.3760	-.1010	-.0960
169.000	1.0550								-.2870						
172.000	1.0550						.6290								
180.000	1.0550	.1620	-.6330	-.6240	.0680	.5170			.0480		-.9760	-.5210	-.2390	-.0530	-.0520

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2680							-.4800		-.3870
40.000	.3170	.3220		.1690	.0520	-.0680	-.6100			-.2200
70.000		-.6230	-.8650	-.4000	-.5000	-.2930	.0510	-.0190		
90.000		-.4200	-.5620	-.2110	-.4170	-.3070	-.1130	-.1190		
105.000				.0670	-.2990	-.3600	-.1500	-.1460		
110.000									-.2090	
120.000		-.3590	-.0540	.3680	-.2150	-.5170	-.1150	-.0920	-.1660	
135.000				.2260	-.1830	-.6850	-.1250	-.1550		
150.000		-.2340	-.0420	.0220	-.2210	-.4140	-.1640	-.1700		
165.000		-.2330		.0450	-.0590	-.3340	-.2300	-.1750		
180.000		-.2060	-.0900	-.0350						

AMES 11-7D7 OA12 O2A ORBITER FUSELAGE (RBPB31)

MACH (2) = .901 BETA (3) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0540	1.0410	.0000	-.1330	.2040	.2190			.1960		.1460	.1200	.1330	.1710	.2410
25.000	1.0540		.4080	-.0920	.2050	.2170			.1970		.1340				
45.000	1.0540		.3820	-.0810	.1660	.2000			.1610		.0000	-.0510	-.0690	.1020	.2290
55.000	1.0540		.2860	-.2220	.0340	.0210			.0230		-.0570				
75.000	1.0540		.1150	-.3540	-.0940	.0860			.0610		-.0980	-.6490	-.5310	-.2050	-.2400
90.000	1.0540	.6240	-.1090	-.5450	.0180	.1110			.0850		-.1960	-.8190	-.4810	-.1900	-.1680
105.000	1.0540														
110.000	1.0540														
120.000	1.0540		-.3630	-.5920	.0500	.1970			.1930		-.5550	-.8050	-.4010	-.0950	-.0880
135.000	1.0540														
142.000	1.0540									-.7910					
150.000	1.0540		-.4750	-.5880	.0790	.4000			.0110		-.9490	-.4940	-.3620	-.0440	-.1020
157.000	1.0540							.3510							
162.000	1.0540								-.1510						
165.000	1.0540										-.8680	-.5030	-.3290	.0240	-.0390
169.000	1.0540								-.2590						
172.000	1.0540						.5690								
180.000	1.0540	.1660	-.6400	-.5970	.0820	.5030			.0580		-.7720	-.5780	-.1560	.0000	-.0270

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2680							-.4840		-.4190
45.000	.2810	.2980		.1680	.0600	-.0930	-.6190			-.3030
75.000		-.5740	-.8040	-.4120	-.4120	-.2010	.0470	-.0420		
90.000		-.4450	-.5770	-.3970	-.5080	-.5470	-.1000	-.1280		
105.000				-.2350	-.4000	-.5510	-.1320	-.1640		
110.000									-.2530	
120.000		-.2750	-.0940	.0990	-.3470	-.6080	-.1320	-.1210	-.2140	
135.000				.2360	-.1480	-.6000	-.2000	-.1530		
150.000		-.2310	-.0650	.1490	-.1350	-.5300	-.3360	-.2370		
165.000		-.2000		.0630	.0300	-.4330	-.3040	-.1960		
180.000		-.1620	-.0500	-.0110						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB31)

MACH (2) = .897 BETA (4) = 4.200

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0620	1.0230	.0000	-.1330	.2060	.2130			.1930		.1450	.1190	.1290	.1650	.2360
20.000	1.0620		.3450	-.1320	.1760	.1960			.1840		.1160				
40.000	1.0620		.2560	-.2070	.0790	.1180			.0700		-.1300	-.1640	-.1130	.0220	.1780
55.000	1.0620		.1320	-.4130	-.0850	-.0750			-.0630		-.1400				
70.000	1.0620		-.0560	-.5770	-.1770	.0350			.0060		-.1620	-.6930	-.6090	-.2100	-.2620
90.000	1.0620	.4920	-.2610	-.6470	-.0130	.0780			.0300		-.2480	-.8500	-.3950	-.1550	-.1610
105.000	1.0620														
110.000	1.0620														
120.000	1.0620		-.4740	-.6120	-.0060	.1700			.0630		-.5690	-.9510	-.3060	-.0860	-.0900
135.000	1.0620														
142.000	1.0620									-.8830					
150.000	1.0620		-.5480	-.5920	.0390	.3470			-.0390		-.6120	-.5500	-.2700	-.0680	-.0470
157.000	1.0620							.2620							
162.000	1.0620								-.2370						
165.000	1.0620										-.5980	-.5790	-.2860	.0360	-.0260
169.000	1.0620								-.2680						
172.000	1.0620						.5630								
180.000	1.0620	.1920	-.6480	-.6120	.0570	.5170			.0370		-1.0630	-.5020	-.2850	-.0480	-.0550

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2580							-.4780		-.2110
40.000	.2390	.2690		.1660	.0660	-.0930	-.6060			-.2170
70.000		-.5470	-.6860	-.4290	-.3900	-.1720	-.0020	-.0840		
90.000		-.4460	-.5470	-.4970	-.5660	-.4920	-.1070	-.1270		
105.000				-.3850	-.5050	-.5610	-.1570	-.1790		
110.000									-.2580	
120.000		-.2610	-.1650	-.2470	-.5170	-.6680	-.1930	-.1550	-.2290	
135.000				.2070	-.1280	-.6110	-.3810	-.1800		
150.000		-.1960	-.0660	.2210	-.0270	-.4900	-.4370	-.2290		
165.000		-.1670		.1170	.0600	-.3980	-.3840	-.1880		
180.000		-.1900	-.0840	-.0340						

AMES 11-7ft OA12 OA ORBITER FUSELAGE (RBPB31)

MACH (2) = .090 BETA (5) = 8.350

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3266	.3953	.5126
PHI															
.000	1.0090	1.0180	.0000	-.1400	.1800	.1940			.1730		.1300	.1110	.1230	.1470	.2210
20.000	1.0090		.2830	-.1730	.1370	.1640			.1500		.0940				
40.000	1.0090		.1490	-.3080	-.0190	.0110			-.0540		-.2880	-.3050	-.2360	-.0750	.1210
55.000	1.0090		.0070	-.5870	-.2250	-.1750			-.1380		-.2180				
70.000	1.0090		-.2420	-.6770	-.2970	-.0480			-.0430		-.2230	-.7160	-.6580	-.2820	-.2970
90.000	1.0090	.3660	-.3880	-.6840	-.1770	.0510			-.0140		-.2970	-.8690	-.3920	-.1530	-.1830
105.000	1.0090														
110.000	1.0090														
120.000	1.0090		-.5750	-.5870	-.1690	.1230			-.0190		-.5160	-.8480	-.2870	-.0650	-.1050
135.000	1.0090														
142.000	1.0090									-.8380					
150.000	1.0090		-.6260	-.6490	-.0180	.3130			-.1030		-.7120	-.5930	-.3610	-.0020	-.0460
157.000	1.0090							.1710							
162.000	1.0090								-.3300						
165.000	1.0090										-.5860	-.6110	-.3170	.0120	-.0330
169.000	1.0090								-.3020						
172.000	1.0090						.5230								
180.000	1.0090	.1790	-.6560	-.6610	-.0100	.4720			.0020		-1.0210	-.5370	-.4250	-.0900	-.0950

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2410							-.4090		-.2050
40.000	.1830	.2270		.1540	.0610	-.0980	-.4960			-.2010
70.000		-.5110	-.6400	-.5110	-.4250	-.2330	-.0160	-.1060		
90.000		-.4560	-.5680	-.5830	-.6460	-.4810	-.1150	-.1180		
105.000				-.4430	-.5780	-.6090	-.1970	-.1620		
110.000									-.2860	
120.000		-.2840	-.2120	-.2790	-.5770	-.7970	-.3320	-.1340	-.2550	
135.000				.3380	-.0580	-.6390	-.5900	-.1680		
150.000		-.1910	-.0630	.1400	-.1240	-.5270	-.5170	-.2680		
165.000		-.1830		.0830	-.0680	-.4760	-.4580	-.2190		
180.000		-.2150	-.0930	-.0430						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBP832) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 20.000 RUDDER = .000
ELEVON = -20.000 RUDFLR = .000

MACH (1) = .60 BETA (1) = -7.980

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.7040	.9410	.0000	.1050	.2600	.2560			.2360		.2120	.2060	.2230	.2430	.2640
20.000	.7040		.6100	.2120	.2930	.2800			.2800		.2370				
40.000	.7040		.6480	.3070	.3470	.3250			.2980		.1730	.1280	.2110	.2820	.3340
55.000	.7040		.5410	.1840	.1880	.0560			.0430		-.0130				
70.000	.7040		.3370	-.0110	-.0390	.0770			.0460		-.0810	-.4390	-.3170	-.2580	-.4980
90.000	.7040	.5850	.0040	-.2340	-.0180	.0150			.0000		-.2000	-.7230	-.4470	-.3880	-.3290
105.000	.7040														
110.000	.7040														
125.000	.7040		-.4390	-.4170	-.1520	-.0210			.1880		-.7600	-.7060	-.5070	-.4750	-.4250
135.000	.7040														
142.000	.7040									-.6360					
150.000	.7040		-.6770	-.5560	-.1710	.1870			-.3630		-1.1190	-.3620	-.2650	-.2550	-.2480
157.000	.7040							.1110							
162.000	.7040								-.5590						
165.000	.7040										-.5820	-.2880	-.2420	-.2450	-.2450
169.000	.7040								-.8220						
172.000	.7040						.3420								
180.000	.7040	-.3840	-.9110	-.3400	-.1490	.2700			-.3580		-.6280	-.2480	-.3990	-.1680	-.1300

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2880							-.1010		-.1340
40.000	.3680	.3330		.1110	-.0310	-.3670	-.1850			-.1440
70.000		-.0280	-.0240	-.4010	-.2020	-.0140	.1470	.1010		
90.000		-.5650	-.4790	-.3870	-.2420	-.1260	-.0470	-.0510		
105.000				.0010	-.1450	-.1300	-.0870	-.1140		
110.000									-.2280	
125.000		-.3290	-.0990	.3390	-.0510	-.1270	-.0620	-.0440	-.1130	
139.000				-.0330	-.3260	-.4020	-.2840	-.2770		
150.000		-.2030	-.0540	-.0590	-.3460	-.1980	-.1370	-.2080		
169.000		-.2240		-.0430	-.0630	-.1630	-.1330	-.2320		
180.000		-.1730	-.0990	-.1050						

AMES 11-7X7 OA12 OBA ORBITER FUSELAGE (RBFB32)

MACH (1) = .597 BETA (2) = -3.95

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.7370	.9770	.0000	.1390	.2990	.2790			.2620		.2360	.2270	.2420	.2580	.2810
20.000	.7370		.5910	.2090	.3040	.2940			.2790		.2380				
40.000	.7370		.5540	.2190	.2780	.2590			.2150		.0490	.0070	.1180	.2070	.2880
55.000	.7370		.3880	.0360	.0580	-.1810			-.0750		-.1140				
70.000	.7370		.1530	-.1670	-.1640	-.0420			-.0330		-.1630	-.5050	-.3650	-.3140	-.5690
90.000	.7370	.4650	-.1740	-.3570	-.0920	-.0360			-.0500		-.2440	-.7450	-.4580	-.3930	-.3430
105.000	.7370														
110.000	.7370														
120.000	.7370		-.5610	-.4710	-.1500	-.0190			.1270		-.7350	-.6310	-.4320	-.3790	-.3350
135.000	.7370														
142.000	.7370									-.6640					
150.000	.7370		-.7250	-.5870	-.1310	.2140			-.3960		-.9750	-.3110	-.2480	-.2210	-.2310
157.000	.7370							.1090							
162.000	.7370								-.6050						
165.000	.7370										-.5230	-.2430	-.2210	-.1350	-.1970
169.000	.7370								-.8110						
172.000	.7370						.3710								
180.000	.7370	-.3490	-.9010	-.3240	-.1060	.3220			-.3250		-.5440	-.1730	-.1550	-.1330	-.0780

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2830							-.1030		-.1320
40.000	.3270	.3170		.1210	-.0200	-.3770	-.2360			-.1540
70.000		-.8280	-.6080	-.3710	-.2110	.0240	.2460	.1920		
90.000		-.6540	-.5760	-.4910	-.3260	-.1320	-.0380	-.0380		
105.000				-.1780	-.2470	-.1510	-.0900	-.1080		
110.000									-.2180	
120.000		-.2740	-.0300	.1700	-.2100	-.1740	-.0910	-.0720	-.1380	
135.000				.1510	-.2270	-.3090	-.2030	-.2110		
150.000		-.1960	-.0290	.0500	-.2260	-.2170	-.1550	-.2030		
165.000		-.2080		-.0180	-.0170	-.2430	-.2040	-.2190		
180.000		-.0980	-.0240	-.0240						

AMES 11-7ft OA12 OEA ORBITER FUSELAGE (RBPB32)

MACH (1) = .999 BETA (3) = .070

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.7580	.9620	.0000	.1390	.2990	.2780			.2620		.2330	.2280	.2480	.2600	.2890
20.000	.7580		.5250	.1690	.2870	.2720			.2620		.2200				
40.000	.7580		.4300	.1060	.1830	.1610			.0940		-.1170	-.1660	-.0190	.1250	.2390
55.000	.7580		.2260	-.1220	-.0720	-.2070			-.1900		-.2160				
70.000	.7580		-.0310	-.3150	-.2620	-.0750			-.1030		-.2280	-.5770	-.4200	-.3700	-.6260
90.000	.7580	.3500	-.3390	-.4760	-.1420	-.0750			-.1030		-.2950	-.7730	-.4560	-.3860	-.3590
105.000	.7580														
110.000	.7580														
120.000	.7580		-.6590	-.5490	-.1400	-.0080			.0430		-.6980	-.5610	-.3510	-.2930	-.2460
135.000	.7580														
142.000	.7580									-.6810					
150.000	.7580		-.7510	-.5140	-.1060	.2150			-.4380		-.8640	-.2800	-.2010	-.2320	-.3030
157.000	.7580							.0730							
162.000	.7580								-.6720						
165.000	.7580										-.5150	-.2230	-.1760	-.0760	-.0970
169.000	.7580								-.8070						
172.000	.7580						.3690								
180.000	.7580	-.3140	-.8770	-.3150	-.0870	.3370			-.3110		-.5340	-.1510	-.1040	-.0680	-.0760

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2930							-.1010		-.1250
40.000	.2860	.2930		.1220	-.0120	-.3790	-.2860			-.1630
70.000		-.7930	-.5650	-.3450	-.1990	.0200	.1890	.1110		
90.000		-.6990	-.6020	-.5740	-.3680	-.1530	-.0320	-.0400		
105.000				-.3900	-.3060	-.1650	-.1020	-.1230		
110.000									-.2510	
120.000		-.2470	-.0760	-.0610	-.3910	-.2380	-.1240	-.1070	-.1760	
135.000				.2560	-.1780	-.2650	-.1660	-.1800		
150.000		-.2480	-.0690	.1960	-.2330	-.3080	-.2410	-.2480		
165.000		-.1430		.0510	.0870	-.2340	-.2270	-.2260		
180.000		-.0940	-.0170	-.0270						

AMES 11-7U7 OA12 OEA ORBITER FUSELAGE (RBFB32)

MACH (1) = .398 BETA (4) = 4.190

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.7220	.9580	.0000	.1160	.2850	.2650			.2520		.2230	.2210	.2360	.2510	.2780
20.000	.7220		.4490	.1160	.2570	.2370			.2240		.1820				
40.000	.7220		.2780	-.0220	.0750	.0210			-.0660		-.3210	-.3660	-.1730	.0230	.1720
55.000	.7220		.0430	-.2920	-.2050	-.3470			-.3050		-.3280				
70.000	.7220		-.2230	-.4730	-.3690	-.1360			-.1650		-.2860	-.6200	-.4490	-.4250	-.6460
90.000	.7220	.2090	-.5250	-.5760	-.1890	-.1140			-.1470		-.3280	-.7630	-.4330	-.3650	-.3720
105.000	.7220														
110.000	.7220														
120.000	.7220		-.7610	-.6440	-.1400	-.0190			-.0470		-.6550	-.4750	-.2750	-.2250	-.2090
135.000	.7220														
142.000	.7220									-.7060					
150.000	.7220		-.8050	-.4320	-.1020	.1850			-.4900		-.7490	-.2430	-.1390	-.1320	-.1910
157.000	.7220							.0010							
162.000	.7220								-.7740						
165.000	.7220										-.5200	-.2080	-.1350	-.0660	-.0840
169.000	.7220								-.8360						
172.000	.7220						.3350								
180.000	.7220	-.2860	-.8760	-.3280	-.1030	.3180			-.3290		-.5530	-.1660	-.1670	-.1310	-.1850

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2790							-.0990		-.1240
40.000	.2320	.2570		.1150	-.0070	-.3830	-.3370			-.1710
70.000		-.7460	-.5340	-.3980	-.2110	.0210	.1550	.0560		
90.000		-.7170	-.6260	-.6160	-.3910	-.1550	-.0040	-.0210		
105.000				-.5380	-.3740	-.1970	-.0860	-.1110		
110.000									-.2560	
120.000		-.2930	-.1350	-.4470	-.5760	-.2850	-.1520	-.1410	-.1990	
135.000				.0890	-.1120	-.2850	-.1920	-.1930		
150.000		-.1630	.0060	.3230	-.0690	-.3090	-.2360	-.2490		
165.000		-.1100		.1360	.0960	-.2880	-.2390	-.2170		
180.000		-.0890	-.0140	-.0270						

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBPB32)

MACH (1) = .600 BETA (5) = 8.290

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0073	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.7190	.8270	.0000	.1030	.2540	.2430			.2340		.2020	.2050	.2170	.2310	.2530
20.000	.7190		.3620	.0550	.2010	.1880			.1840		.1440				
40.000	.7190		.1290	-.1530	-.0500	-.1410			-.2360		-.5490	-.5670	-.3600	-.0990	.0940
55.000	.7190		-.1040	-.4440	-.3400	-.4840			-.4040		-.4650				
70.000	.7190		-.4150	-.6270	-.4470	-.1980			-.2180		-.3410	-.6660	-.5040	-.4670	-.6710
90.000	.7190	.0430	-.6960	-.7060	-.2240	-.1330			-.1790		-.3560	-.7520	-.4120	-.3540	-.4110
105.000	.7190														
110.000	.7190														
120.000	.7190		-.8750	-.7330	-.1470	-.0460			-.1200		-.6110	-.4390	-.2360	-.2150	-.2370
135.000	.7190														
142.000	.7190									-.7070					
150.000	.7190		-.8640	-.4130	-.1280	.1320			-.5600		-.6650	-.2190	-.1100	-.1020	-.1210
157.000	.7190							-.0990							
162.000	.7190								-.9080						
165.000	.7190										-.5440	-.1940	-.1130	-.0740	-.1110
169.000	.7190								-.8930						
172.000	.7190						.2590								
180.000	.7190	-.2890	-.9070	-.3710	-.1400	.2600			-.3720		-.6180	-.2310	-.4020	-.1790	-.1370

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2610							-.1050		-.1360
40.000	.1690	.2060		.1030	-.0220	-.3860	-.3930			-.1780
70.000		-.7180	-.5470	-.4150	-.2050	-.0010	.1340	.1150		
90.000		-.7560	-.6170	-.6670	-.4280	-.1620	-.0460	-.0400		
105.000				-.6950	-.4050	-.2110	-.1250	-.1350		
110.000									-.2560	
120.000		-.4090	-.2610	-.4210	-.7570	-.3640	-.2000	-.1690	-.2100	
135.000				.3800	-.1440	-.3580	-.2400	-.2200		
150.000		-.1760	-.0310	.1380	-.2180	-.4080	-.3330	-.3040		
165.000		-.1600		.0590	.0020	-.3960	-.3360	-.2490		
180.000		-.1620	-.0940	-.1060						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBP932)

MACH (2) = .902 BETA (1) = -8.070

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0189	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3209	.3953	.5129
PHI															
.000	.9670	1.0859	.0000	.1180	.3170	.3090			.2919		.2579	.2329	.2459	.2679	.3279
20.000	.9670		.7000	.2330	.3440	.3430			.3290		.2809				
40.000	.9670		.7420	.3380	.3940	.3919			.3660		.2539	.1939	.2459	.2979	.3939
55.000	.9670		.6490	.2280	.2590	.1660			.1670		.1259				
70.000	.9670		.4660	.0570	.0210	.1850			.1820		.0689	-.4639	-.3489	-.3139	-.3739
90.000	.9670	.7660	.1640	-.2090	.0380	.1390			.1690		-.0349	-.6999	-.5929	-.4699	-.1949
105.000	.9670														
110.000	.9670														
125.000	.9670		-.2770	-.5040	-.0920	.1410			.4070		-.6199	-1.1689	-.8199	-.2529	-.2819
135.000	.9670														
142.000	.9670									-.5140					
150.000	.9670		-.5190	-.6840	-.1050	.3870			.1680		-1.0829	-.7349	-.5049	-.2399	-.1769
157.000	.9670							.3960							
162.000	.9670								-.0950						
165.000	.9670										-.6519	-.5399	-.2579	-.1389	-.2179
169.000	.9670								-.3720						
172.000	.9670						.5590								
180.000	.9670	-.0420	-.7800	-.6180	-.1240	.4270			-.0530		-1.0429	-.7019	-.3189	-.0559	-.0819

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3460							-.3880		-.2410
40.000	.4330	.4310		.2530	.1270	-.0660	-.5470			-.2150
70.000		-.8030	-1.0210	-.6540	-.7360	-.5530	-.3190	-.2110		
90.000		-.5310	-.8770	-.5160	-.7680	-.5240	-.3950	-.3170		
105.000				-.0330	-.5580	-.4380	-.3780	-.3410		
110.000									-.3430	
120.000		-.4650	-.1700	.4150	-.2160	-.4860	-.3160	-.1670	-.2090	
135.000				.0110	-.3310	-.9060	-.2400	-.2550		
150.000		-.2940	-.1020	-.0810	-.3580	-.6140	-.2040	-.2190		
165.000		-.2830		-.0340	-.1060	-.4990	-.2590	-.2760		
180.000		-.3060	-.1690	-.0890						

DATE 17 SEP 75 TABULATED PRESSURE DATA - OA12A (RBPB32)

AMES 11-7X7 OA12 02A ORBITER FUSELAGE

MACH (2) = .898 BETA (2) = -4.000

DEPENDENT VARIABLE CP

SECTION (1)ORBITER FUSELAGE

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI									.3060		.2680	.2480	.2550	.2790	.3390
.000	.9940	1.1110	.0000	.1330	.3350	.3980			.3260		.2730				
20.000	.9940		.6650	.2150	.3460	.3410			.2960		.1410	.0940	.1540	.2490	.3520
40.000	.9940		.6400	.2350	.3210	.3280			.0560		.0280				
55.000	.9940		.5140	.0670	.1190	.0290			.1100		-.0040	-.5620	-.4310	-.4080	-.5200
70.000	.9940		.3000	-.1190	-.1110	.1060			.1200		-.1080	-.7730	-.6640	-.2200	-.2440
90.000	.9940	.6600	-.0030	-.4030	-.0290	.0900									
105.000	.9940								.3260		-.6710	-1.0060	-.4520	-.1710	-.1480
110.000	.9940									-.6320					
120.000	.9940		-.3970	-.6250	-.0760	.1550									
135.000	.9940								.0050		-1.0490	-.6320	-.4920	-.2790	-.1640
142.000	.9940							.4050							
150.000	.9940		-.5880	-.6390	-.0460	.4020			-.1200						
157.000	.9940										-.7880	-.4540	-.4030	-.0240	-.1660
162.000	.9940								-.3500						
165.000	.9940														
169.000	.9940						.5710		-.0130		-.8920	-.5800	-.2290	-.0170	-.0620
172.000	.9940														
180.000	.9940	-.0220	-.6900	-.5410	-.1240	.4350									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI								-.3990		-.3690
.000	.3620									-.2930
40.000	.4030	.4220		.2630	.1440	-.0580	-.5500			
70.000		-.8100	-.9740	-.5940	-.5370	-.4290	-.2580	-.2070		
90.000		-.6570	-.8770	-.6460	-.8350	-.3490	-.3960	-.3180		
105.000				-.2170	-.5560	-.4800	-.4040	-.3350	-.3300	
110.000									-.2480	
120.000		-.3370	-.0900	.3080	-.2850	-.6760	-.2860	-.2040		
135.000				.2240	-.2460	-.7640	-.2070	-.2180		
150.000		-.2690	-.0900	.0000	-.2340	-.6290	-.2470	-.2410		
165.000		-.2990		.0130	-.0850	-.5480	-.3420	-.2650		
180.000		-.2730	-.1340	-.0650						

AMES 11-7ft OA12 OEA ORBITER FUSELAGE (RBP032)

MACH (2) = .905 BETA (3) = .07D

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.9850	1.0970	.6000	.1220	.3360	.3280			.3090		.2680	.2460	.2570	.2770	.3410
20.000	.9850		.6100	.1620	.3310	.3260			.3110		.2540				
40.000	.9850		.5270	.1230	.2320	.2410			.1910		.0020	-.0310	.0480	.1510	.3010
55.000	.9850		.3670	-.0920	-.0190	-.0930			-.0450		-.0650				
70.000	.9850		.1420	-.2960	-.2180	.0440			.0480		-.0710	-.6220	-.5280	-.3970	-.6220
90.000	.9850	.5560	-.1440	-.5810	-.0710	.0620			.0770		-.1720	-.8170	-.7400	-.2220	-.2660
105.000	.9850														
110.000	.9850														
120.000	.9850		-.4870	-.6620	-.0500	.1570			.2470		-.6600	-1.0150	-.4790	-.1600	-.1230
135.000	.9850														
142.000	.9850									-.7440					
150.000	.9850		-.6330	-.5490	-.0900	.3540			-.0170		-1.0190	-.6240	-.4480	-.1370	-.2290
157.000	.9850							.3250							
162.000	.9850								-.1520						
165.000	.9850										-.8710	-.4820	-.4190	.0360	-.0660
169.000	.9850								-.2790						
172.000	.9850						.4300								
180.000	.9850	-.0160	-.5940	-.4820	-.1430	.3780			-.0050		-.8280	-.5470	-.1640	.0160	-.0360

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3670							-.4000		-.3910
40.000	.3640	.3950		.2670	.1550	-.0470	-.5450			-.3400
70.000		-.7440	-.9350	-.5600	-.4660	-.3200	-.2050	-.1880		
90.000		-.6580	-.9000	-.8120	-.9290	-.2560	-.3920	-.3120		
105.000				-.4040	-.6030	-.5760	-.3970	-.3600		
110.000									-.3370	
125.000		-.2870	-.1890	-.0050	-.3820	-.7790	-.2110	-.2890	-.3060	
135.000				.2330	-.1970	-.6570	-.2820	-.2100		
150.000		-.2870	-.1180	.1470	-.1580	-.6230	-.4200	-.2970		
165.000		-.2750		.0330	.0220	-.5310	-.4580	-.2430		
180.000		-.2240	-.1070	-.0560						

AMES 11-7D7 OA12 O2A ORBITER FUSELAGE (RBPB32)

MACH (2) = .897 BETA (4) = 4.220

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9380	1.0620	.0000	.1100	.3250	.3140			.2970		.2610	.2400	.2510	.2690	.3320
25.000	.9380		.5410	.1140	.2950	.2920			.2770		.2290				
40.000	.9380		.4040	-.0010	.1300	.1150			.0480		-.1820	-.1970	-.0780	.0520	.2400
55.000	.9380		.2100	-.2640	-.1960	-.2300			-.1590		-.1630				
70.000	.9380		-.0240	-.4730	-.3070	-.0190			-.0160		-.1360	-.6760	-.6200	-.3540	-.6590
90.000	.9380	.4310	-.2940	-.6820	-.1450	.0320			.0230		-.2370	-.8560	-.7390	-.1920	-.2870
105.000	.9380														
110.000	.9380														
120.000	.9380		-.5910	-.6350	-.1400	.1520			.1260		-.6540	-1.0250	-.4820	-.1720	-.1400
135.000	.9380														
142.000	.9380									-.7660					
150.000	.9380		-.6940	-.5240	-.1420	.2870			-.0840		-1.0020	-.5990	-.2740	-.0070	-.1010
157.000	.9380							.2070							
162.000	.9380								-.2760						
165.000	.9380										-.9800	-.5300	-.3260	.0190	-.0480
169.000	.9380								-.3060						
172.000	.9380						.4480								
180.000	.9380	-.0010	-.6600	-.5520	-.0970	.4300			-.0320		-.9400	-.5610	-.2950	-.0200	-.0770

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3530							-.4010		-.3740
40.000	.3060	.3530		.2540	.1510	-.0430	-.5560			-.3430
70.000		-.7020	-.8640	-.6110	-.4420	-.2720	-.1820	-.2320		
90.000		-.6920	-.8570	-.8910	-1.0270	-.2960	-.3880	-.3380		
105.000				-.5790	-.7320	-.3910	-.4230	-.3870		
110.000									-.3690	
120.000		-.3380	-.2170	-.3270	-.5370	-.7730	-.2920	-.3820	-.3570	
135.000				.1180	-.1860	-.6100	-.2550	-.3110		
150.000		-.3180	-.1780	.2730	-.1130	-.5510	-.3260	-.3580		
165.000		-.2420		.1120	.0970	-.3400	-.2930	-.2740		
180.000		-.2530	-.1280	-.0690						

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBPB32)

MACH (2) = .901 BETA (5) = 8.360

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.9470	1.0800	.0000	.1150	.3170	.3070			.2930		.2550	.2350	.2450	.2630	.3100
20.000	.9470		.4830	.0890	.2540	.2580			.2480		.2030				
40.000	.9470		.2900	-.0970	.0160	-.0230			-.1120		-.3830	-.3960	-.2110	-.0440	.1700
55.000	.9470		.0780	-.4150	-.3100	-.3430			-.2320		-.3080				
70.000	.9470		-.1680	-.6300	-.4740	-.0560			-.0580		-.1970	-.7000	-.7040	-.3450	-.6030
90.000	.9470	.3190	-.4230	-.6910	-.2750	.0290			-.0690		-.2650	-.8760	-.7690	-.1810	-.3250
105.000	.9470														
110.000	.9470														
120.000	.9470		-.6820	-.5460	-.2560	.1270			.0180		-.6000	-1.0070	-.3920	-.1790	-.1950
135.000	.9470									-.8680					
142.000	.9470														
150.000	.9470		-.7230	-.5580	-.1700	.2750			-.1150		-.6770	-.6020	-.2780	-.0150	-.0670
157.000	.9470							.1690							
162.000	.9470								-.3530						
165.000	.9470										-.6130	-.6220	-.2990	.0130	-.0400
169.000	.9470								-.3440						
172.000	.9470						.4700								
180.000	.9470	-.0040	-.7830	-.6270	-.0760	.4220			-.0650		-.9800	-.5990	-.3360	-.0710	-.0820

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3460							-.3900		-.1900
40.000	.2470	.3030		.2420	.1460	-.0390	-.4620			-.2200
70.000		-.6610	-.8330	-.6380	-.4210	-.2930	-.1490	-.1660		
91.000		-.7030	-.8590	-.9180	-1.0650	-.2540	-.2900	-.2750		
105.000				-.7400	-.7690	-.4750	-.3600	-.3450		
110.000									-.3740	
120.000		-.4220	-.3700	-.5280	-.6530	-.8290	-.2750	-.3030	-.3570	
135.000				.3260	-.0200	-.6470	-.4610	-.2190		
150.000		-.2570	-.1380	.1700	-.1090	-.5330	-.4380	-.3090		
165.000		-.2380		.0920	.0030	-.4420	-.3980	-.2730		
180.000		-.2990	-.1620	-.0790						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB33) (01 MAY 73)

REFERENCE DATA

SREF = 2.4219 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = -4.000 RUDDER = .000
ELEVON = .000 RUDFLR = 40.000

MACH (1) = .598 BETA (1) = 4.910

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.5060	.2870	.0000	-.8640	-.1700	-.0750			-.0760		-.0890	-.0730	-.0600	-.0390	-.0460
20.000	.5060		-.5850	-.7770	-.2380	-.1140			-.1100		-.1270				
40.000	.5060		-.3060	-.5060	-.2660	-.2390			-.3000		-.3360	-.2580	-.1820	-.1080	-.0830
55.000	.5060		-.1210	-.3810	-.0770	-.0460			-.0390		-.1000				
75.000	.5060		.0130	-.2430	.0100	.0430			.0040		-.1030	-.3140	-.0380	.0600	.0800
90.000	.5060	.6960	.1110	-.1420	.0800	.0590			-.0010		-.1030	-.3420	-.0470	.0370	.0510
105.000	.5060														
110.000	.5060														
120.000	.5060		.2470	.0730	.1990	.1760			.0020		-.1350	-.2040	-.0310	.0200	.0410
135.000	.5060														
142.000	.5060									-.2780					
150.000	.5060		.2770	.1780	.2840	.4480			.0400		-.3760	-.1250	-.0390	.0010	.0320
157.000	.5060							.3900							
162.000	.5060								-.0380						
165.000	.5060										-.3170	-.1120	.2350	-.0010	.0300
169.000	.5060								-.0960						
172.000	.5060						.6580								
180.000	.5060	.6790	.1410	.1540	.2450	.5510			.2250		-.4750	-.1490	-.1270	-.0550	-.0140

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0650							-.1380		-.1760
40.000	-.1040	-.1840		-.2040	-.2390	-.2280	-.1570			-.1740
70.000		.0030	-.0310	-.0060	.0710	.0110	-.0020	-.0480		
90.000		.0310	.0380	.0460	.0470	-.0200	-.0360	-.0780		
105.000				.0890	-.0190	-.0500	-.0640	-.1020		
110.000									-.2170	
120.000		.0530	.1750	.2190	-.1810	-.0660	-.0430	-.0670	-.1720	
135.000				.4420	.0830	-.0620	-.0190	-.0710		
150.000		.0810	.1730	.2560	.0450	-.0060	.0000	-.0850		
165.000		.0840		.2550	.2170	.0680	-.0030	-.2130		
180.000		.0660	.0750	.1340						

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBPB33)

MACH (1) = .999 BETA (2) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.0920	-.1600	-.0780			-.0780		-.0900	-.0770	-.0540	-.0430	-.0450
20.000	.0000		-.6530	-.8090	-.1880	-.0910			-.0930		-.1080				
40.000	.0000		-.4490	-.6410	-.2130	-.1850			-.1890		-.2280	-.1750	-.1000	-.0630	-.0510
55.000	.0000		-.3140	-.5100	-.1230	-.0780			-.0900		-.1330				
70.000	.0000		-.2230	-.4160	-.0910	-.0380			-.0830		-.1590	-.0680	-.0660	.0250	.0550
90.000	.0000	.5250	-.1390	-.3340	-.0520	-.0540			-.1130		-.1860	-.0940	-.0760	.0050	.0300
105.000	.0000														
110.000	.0000														
120.000	.0000		.0520	-.0930	.0660	.0240			-.2130		-.2080	-.2530	-.0710	-.0120	.0220
135.000	.0000														
142.000	.0000									-.4030					
150.000	.0000		.1810	.1020	.2110	.3440			-.0980		-.3740	-.1500	-.0630	-.0170	.0260
157.000	.0000							.2400							
162.000	.0000								-.1910						
165.000	.0000										-.3680	-.1220	.1220	-.0110	.0160
169.000	.0000								-.1480						
172.000	.0000						.6460								
180.000	.0000	.7290	.1750	.1870	.2720	.5870			.2460		-.4550	-.1200	-.0860	-.0220	.0190

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0650							-.1380	-.1760	
40.000	-.0690	-.1800		-.1900	-.2230	-.2300	-.1640		-.1870	
70.000		-.0330	-.0860	-.0940	-.0120	-.0590	-.0520	-.0840		
90.000		.0000	-.0180	-.0590	-.0570	-.0960	-.0900	-.1160		
105.000				-.0640	-.1360	-.1260	-.1160	-.1480		
110.000								-.2630		
120.000		.0270	.1330	-.0150	-.4020	-.1950	-.1170	-.1310	-.2170	
135.000				.4580	-.0070	-.2060	-.1260	-.1580		
150.000		.0480	.1770	.3380	.1060	-.1210	-.0980	-.1520		
165.000		.0520		.2730	.2110	-.0700	-.1090	-.2230		
180.000		.0510	.1350	.1860						

AMES 11-7ft OA12 02A ORBITER FUSELAGE (RBPB33)

MACH (1) = .998 BETA (3) = 5.280

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.0960	-.1680	-.0840			-.0870		-.0940	-.0820	-.0600	-.0530	-.0540
20.000	.0000		-.7120	-.0230	-.1640	-.0800			-.0810		-.1010				
40.000	.0000		-.5880	-.6960	-.1820	-.1110			-.1150		-.1630	-.1200	-.0610	-.0440	-.0310
55.000	.0000		-.5160	-.6380	-.1510	-.0950			-.1150		-.1520				
70.000	.0000		-.4530	-.5640	-.1550	-.0930			-.1360		-.2010	-.3860	-.0790	.0030	.0350
90.000	.0000	.3250	-.3850	-.5010	-.1580	-.1460			-.2000		-.2460	-.4070	-.0930	-.0130	.0170
105.000	.0000														
110.000	.0000														
120.000	.0000		-.1600	-.2720	-.0890	-.1270			-.4090		-.2620	-.2820	-.1100	-.0440	-.0060
135.000	.0000														
142.000	.0000									-.6160					
150.000	.0000		.0560	-.0050	.1000	.1900			-.2590		-.3860	-.1780	-.1000	-.0410	.0020
157.000	.0000							.0170							
162.000	.0000								-.3920						
165.000	.0000										-.3880	-.1380	.0330	-.0580	-.0440
169.000	.0000								-.2270						
172.000	.0000						.5600								
180.000	.0000	.7150	.1550	.1650	.2440	.5490			.2060		-.4810	-.1390	-.1170	-.0520	-.0170

X/LB	.5873	.6628	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0780							-.1380		-.1810
40.000	-.0470	-.1310		-.1680	-.1880	-.2210	-.1590			-.1850
70.000		-.0570	-.1300	-.1580	-.0770	-.1070	-.0880	-.1190		
90.000		-.0270	-.0710	-.1410	-.1220	-.1470	-.1300	-.1420		
105.000				-.1910	-.2340	-.1830	-.1540	-.1760		
110.000									-.2630	
120.000		-.0110	.0810	-.2420	-.6370	-.2870	-.1790	-.1870	-.2540	
135.000				.4080	-.1680	-.3930	-.2710	-.2510		
150.000		.0250	.1290	.3140	.1450	-.2400	-.2020	-.1940		
165.000		-.0200		.2360	.1610	-.2550	-.2390	-.2310		
180.000		.0150	.0950	.1430						

AMES 11-7U7 OA12 O21 ORBITER FUSELAGE (RBPB33)

MACH (2) = .899 BETA (1) = -4.990

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.6450	-.5160	-.0540			-.1070		-.1690	-.1380	-.0630	-.0280	-.0080
20.000	.0000		-.2800	-.7440	-.4250	-.1030			-.1420		-.2060				
40.000	.0000		-.0590	-.7790	-.2990	-.3120			-.3650		-.4360	-.4600	-.1540	-.0900	-.0370
55.000	.0000		.0720	-.5200	-.0760	-.0350			-.0760		-.1230				
70.000	.0000		.1540	-.3420	.0140	.0730			-.0210		-.1120	-.0810	.0210	.0790	.1090
90.000	.0000	.8420	.2130	-.1910	.0950	.1030			-.0200		-.1250	-.7740	.0110	.0600	.0790
105.000	.0000														
110.000	.0000														
120.000	.0000		.3140	.0660	.2430	.2680			.0220		-.1530	-.7860	.0240	.0420	.0710
135.000	.0000														
142.000	.0000									-.7110					
150.000	.0000		.3330	.1990	.3280	.5700			.2590		-.4760	-.5050	-.0030	.0240	.0540
157.000	.0000							.5530							
162.000	.0000								.1680						
165.000	.0000										-.6610	-.4260	.3980	.0280	.0480
169.000	.0000								.0870						
172.000	.0000						.8130								
180.000	.0000	.8400	.1830	.1820	.2900	.6870			.3830		-1.0950	-.3220	-.0790	-.0260	.0040

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0280							-.1040		-.1610
40.000	-.0450	-.2060		-.2410	-.3300	-.4670	-.2090			-.1770
75.000		.0460	-.0150	-.0330	.0380	-.0220	.0190	-.0240		
90.000		.0680	.0670	.0440	-.0060	-.0560	-.0690	-.0260		
105.000				.0580	-.0040	-.0630	-.0280	-.0460		
110.000									-.2430	
120.000		.0770	.2110	.2770	-.2660	-.1280	-.0070	-.0250	-.1540	
135.000				.5052	.1090	-.0850	.0150	-.0260		
150.000		.0760	.2230	.3160	.0060	-.0020	.0400	-.0530		
165.000		.0850		.3170	.2560	.0770	.0540	-.2580		
180.000		.0350	.1270	.1940						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB33)

MACH (2) = .899 BETA (2) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.6130	-.5170	-.0320			-.0850		-.1480	-.1190	-.0580	-.0130	-.0030
20.000	.0000		-.3450	-.6930	-.4830	-.0670			-.1000		-.1740				
40.000	.0000		-.1860	-.8000	-.2410	-.1850			-.2250		-.2920	-.3110	-.0740	-.0330	-.0060
55.000	.0000		-.1310	-.7900	-.1000	-.0660			-.1300		-.1700				
70.000	.0000		-.0440	-.6640	-.0510	-.0070			-.1150		-.1870	-.7070	-.0170	.0550	.0070
90.000	.0000	.0050	.0040	-.4880	-.0160	-.0040			-.1480		-.1900	-.7900	-.0320	.0380	.0550
105.000	.0000														
110.000	.0000														
120.000	.0000		.1390	-.1230	.0050	.1270			-.1700		-.2100	-.6890	-.0150	.0180	.0520
135.000	.0000														
142.000	.0000									-1.0680					
150.000	.0000		.2440	.1070	.2610	.4790			.1670		-.6730	-.3280	-.0490	.0150	.0530
157.000	.0000							.4170							
162.000	.0000								.0570						
165.000	.0000										-.8290	-.3210	.2430	.0280	.0520
169.000	.0000								.0780						
172.000	.0000						.7990								
180.000	.0000	.7520	.2140	.2010	.3210	.7150			.4040		-1.0790	-.2680	-.0180	.0110	.0480

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0150							-.1040		-.1550
40.000	-.0650	-.1470		-.2210	-.3090	-.4350	-.2360			-.1860
70.000		.0290	-.0490	-.1140	-.1010	-.1140	-.0420	-.0460		
90.000		.0520	.0310	-.0570	-.1670	-.1660	-.0750	-.0570		
105.000				-.0280	-.2660	-.1950	-.0940	-.0890		
110.000									-.2750	
120.000		.0640	.1840	.0740	-.4760	-.2560	-.1050	-.0920	-.1980	
135.000				.5150	.0440	-.2790	-.1360	-.1180		
150.000		.0780	.2180	.3860	.1450	-.1770	-.1060	-.1220		
165.000		.0780		.3300	.2400	-.1020	-.1080	-.2590		
180.000		.0780	.1780	.2370						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB33)

MACH (2) = .9U0 BETA (3) = 5.35U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.6400	-.5350	-.0470			-.1050		-.1620	-.1360	-.0600	-.0250	-.0110
20.000	.0000		-.3910	-.6610	-.5400	-.0420			-.0980		-.1660				
40.000	.0000		-.3000	-.6210	-.2710	-.0930			-.1540		-.2880	-.2000	-.0480	-.0190	.0480
55.000	.0000		-.2880	-.6440	-.0910	-.0750			-.1620		-.3420				
70.000	.0000		-.2300	-.6730	-.0510	-.0600			-.1830		-.4480	-.6530	-.0410	.0480	.0720
90.000	.0000	.5180	-.1950	-.7670	-.1050	-.0960			-.2450		-.4930	-.7550	-.0520	.0270	.0460
105.000	.0000														
110.000	.0000														
120.000	.0000		-.0380	-.3410	-.0640	-.0240			-.3440		-.5910	-.5560	-.0860	-.0430	.0330
135.000	.0000														
142.000	.0000									-1.1780					
150.000	.0000		.1320	-.0090	.1420	.3480			.0500		-.6120	-.4990	-.0700	.0370	.0480
157.000	.0000							.2340							
162.000	.0000								-.0910						
165.000	.0000										-.6530	-.5710	.1200	-.0130	-.0160
169.000	.0000								.0350						
172.000	.0000						.7230								
180.000	.0000	.7560	.2010	.1840	.3000	.6840			.3750		-.9940	-.5070	-.0900	-.0160	.0140

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0300							-.1060		-.1630
40.000	.0010	-.1170		-.2230	-.2950	-.4100	-.2440			-.1910
70.000		.0200	-.0610	-.1730	-.1780	-.4130	-.1580	-.0940		
90.000		.0420	.0090	-.1330	-.2620	-.4510	-.2040	-.0990		
105.000				-.1390	-.4130	-.4650	-.2480	-.1340		
110.000									-.2870	
120.000		.0480	.1410	-.1140	-.6370	-.5270	-.3540	-.1620	-.2530	
135.000				.5050	-.0310	-.7000	-.4770	-.2320		
150.000		.0510	.1710	.3210	.1860	-.3600	-.4320	-.1890		
165.000		.0250		.2840	.2230	-.3170	-.3640	-.2850		
180.000		.0430	.1540	.2110						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB34) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.3490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000
ELEVON = .000 RUDFLR = 40.000

MACH (1) = .599 BETA (1) = -7.990

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.7270	-.1390	-.0630			-.0680		-.0820	-.0700	-.0510	-.0310	-.0240
25.000	.0000		-.3650	-.6570	-.2000	-.0970			-.1000		-.1120				
40.000	.0000		-.0640	-.4320	-.1690	-.2410			-.2490		-.2720	-.2050	-.1330	-.0780	-.1370
55.000	.0000		.1220	-.2090	.0410	.0580			.0480		-.0160				
70.000	.0000		.2100	-.0880	.1170	.1290			.0830		-.0310	-.2860	-.0280	.0460	.0480
90.000	.0000	.8220	.2510	-.0170	.1610	.1520			.0880		-.0540	-.3450	-.0350	.0240	.0480
105.000	.0000														
110.000	.0000														
120.000	.0000		.2660	.1020	.2400	.2440			.1380		-.1690	-.2460	-.0690	-.0220	-.0690
135.000	.0000									-.2840					
142.000	.0000														
150.000	.0000		.1880	.1070	.2370	.4400			.0330		-.5080	-.1690	-.0870	-.0490	-.0280
157.000	.0000							.4030							
162.000	.0000								-.0820						
165.000	.0000										-.3510	-.1390	-.0700	-.0290	-.0110
169.000	.0000								-.2250						
172.000	.0000						.5900								
180.000	.0000	.5420	-.0420	.0290	.1360	.4650			.0870		-.5840	-.2240	-.2070	-.2060	-.1940

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0360							-.1270		-.1690
40.000	-.0510	-.1210		-.1700	-.2190	-.2230	-.1540			-.1750
70.000		-.0720	-.0670	-.0100	.1060	.0350	.0230	-.0390		
90.000		-.0320	.0150	.0720	.0850	-.0040	-.0140	-.0660		
105.000				.1500	.0440	-.0240	-.0420	-.0910		
110.000									-.2040	
120.000		-.0200	.1410	.3430	-.0650	-.0590	-.0190	-.0430	-.1470	
135.000				.2990	.0190	-.0860	-.0210	-.0770		
150.000		-.0080	.1130	.1330	-.0760	-.0140	.0150	-.0880		
165.000		.0140		.1830	.1530	.0830	.0290	-.2140		
180.000		-.1460	-.0540	-.0100						

AMES 11-7U7 OA12 OEA ORBITER FUSELAGE (RBFB34)

MACH (1) = .599 BETA (2) = -3.950

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.6960	-.1090	-.0390			-.0470		-.0630	-.0520	-.0340	-.0150	-.0140
20.000	.0000		-.3720	-.6230	-.1470	-.0620			-.0620		-.0810				
40.000	.0000		-.1470	-.4560	-.1270	-.1350			-.1420		-.1790	-.1350	-.0670	-.0310	-.0110
55.000	.0000		-.0240	-.3040	-.0040	.0320			.0050		-.0600				
70.000	.0000		.0340	-.2110	.0280	.0620			.0150		-.0920	-.3370	-.0600	.0100	.0210
90.000	.0000	.6960	.0620	-.1660	.0810	.0700			.0050		-.1180	-.3940	-.0660	-.0040	-.0050
105.000	.0000														
110.000	.0000														
120.000	.0000		.1130	-.0200	.1580	.1590			-.0010		-.2090	-.2530	-.0740	-.0250	-.0090
135.000	.0000														
142.000	.0000									-.3670					
150.000	.0000		.1140	.0660	.2040	.3970			-.0600		-.4850	-.1690	-.0760	-.0320	-.0130
157.000	.0000							.3220							
162.000	.0000								-.1670						
165.000	.0000										-.3910	-.1500	-.0690	-.0300	-.0070
169.000	.0000								-.2350						
172.000	.0000						.6150								
180.000	.0000	.5680	-.0240	.0570	.1760	.5210			.1300		-.5200	-.1660	-.1480	-.0720	-.0450

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0200							-.1270		-.1760
40.000	-.0170	-.0880		-.1480	-.1890	-.2120	-.1490			-.1730
70.000		-.1030	-.1190	-.0710	.0420	-.0130	-.0120	-.0580		
90.000		-.0600	-.0290	-.0080	.0070	-.0560	-.0560	-.0870		
105.000				.0430	-.0460	-.0770	-.0790	-.1180		
110.000									-.2230	
120.000		-.0210	.1280	.2050	-.2020	-.1200	-.0610	-.0810	-.1560	
135.000				.3830	.0180	-.1180	-.0540	-.0970		
150.000		.0080	.1320	.1990	-.0120	-.0730	-.0430	-.1160		
165.000		.0130		.1990	.1540	-.0030	-.0540	-.2170		
180.000		-.0290	.0430	.0980						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB34)

MACH (1) = .599 BETA (3) = .090

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.7100	-.1060	-.0410			-.0440		-.0800	-.0470	-.0260	-.0170	-.0100
20.000	.0000		-.4210	-.6380	-.1240	-.0480			-.0480		-.0720				
40.000	.0000		-.2710	-.4950	-.1180	-.0820			-.0870		-.1410	-.1060	-.0430	-.0200	.0060
55.000	.0000		-.1840	-.4100	-.0520	-.0120			-.0380		-.1010				
70.000	.0000		-.1460	-.3470	-.0460	-.0010			-.0500		-.1420	-.3750	-.0900	-.0160	.0010
90.000	.0000	.5510	-.1310	-.3070	-.0100	-.0070			-.0670		-.1700	-.4210	-.0870	-.0200	-.0180
105.000	.0000														
110.000	.0000														
120.000	.0000		-.0330	-.1380	.0660	.0590			-.1470		-.2450	-.2700	-.0840	-.0280	-.0070
135.000	.0000									-.4490					
142.000	.0000														
150.000	.0000		.0350	.0040	.1550	.3280			-.1580		-.4520	-.1730	-.0810	-.0330	-.0110
157.000	.0000							.2120							
162.000	.0000								-.2830						
165.000	.0000										-.4200	-.1530	-.0700	-.0340	-.0100
169.000	.0000								-.2730						
172.000	.0000						.5980								
180.000	.0000	.5850	-.0040	.0700	.1930	.5390			.1440		-.5020	-.1410	-.1030	-.0440	-.0060

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0200							-.1250		-.1770
40.000	.0040	-.0710		-.1350	-.1810	-.2080	-.1510			-.1820
70.000		-.1270	-.1580	-.1310	-.0280	-.0630	-.0540	-.0830		
90.000		-.0770	-.0660	-.0830	-.0760	-.1020	-.0950	-.1120		
105.000				-.0770	-.1350	-.1320	-.1200	-.1410		
110.000									-.2490	
120.000		-.0270	.0970	.0300	-.3630	-.1890	-.1090	-.1210	-.1970	
135.000				.4170	-.0350	-.2030	-.1170	-.1400		
150.000		.0070	.1320	.2590	.0310	-.1530	-.1180	-.1610		
165.000		.0070		.2200	.1520	-.1060	-.1420	-.2160		
180.000		.0110	.0970	.1350						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB34)

MACH (1) = .599 BETA (4) = 4.200

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5125
PHI															
.000	.0000	.0000	.0000	-.7230	-.1150	-.0400			-.0510		-.0650	-.0530	-.0340	-.0240	-.0110
20.000	.0000		-.4760	-.6490	-.1110	-.0440			-.0520		-.0740				
40.000	.0000		-.3840	-.5530	-.1170	-.0530			-.0630		-.1250	-.0990	-.0480	-.0170	.0040
55.000	.0000		-.3450	-.5170	-.0950	-.0420			-.0730		-.1230				
70.000	.0000		-.3330	-.4650	-.1090	-.0520			-.0990		-.1750	-.3990	-.1010	-.0240	-.0110
90.000	.0000	.3950	-.3320	-.4400	-.0870	-.0750			-.1390		-.2180	-.4320	-.0940	-.0300	-.0230
105.000	.0000														
110.000	.0000														
125.000	.0000		-.1980	-.2630	-.0380	-.0470			-.2870		-.2840	-.2760	-.0980	-.0370	-.0110
135.000	.0000														
142.000	.0000									-.5930					
150.000	.0000		-.0580	-.0710	.0770	.2240			-.2720		-.4350	-.1840	-.0990	-.0440	-.0240
157.000	.0000							.0530							
162.000	.0000								-.4380						
165.000	.0000										-.4190	-.1580	-.0550	-.0460	-.0360
169.000	.0000								-.3270						
172.000	.0000						.5420								
180.000	.0000	.3890	-.0110	.0540	.1750	.5180			.1190		-.5240	-.1570	-.1270	-.0680	-.0400

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0270							-.1220		-.1780
40.000	.0000	-.0550		-.1230	-.1630	-.2020	-.1490			-.1680
70.000		-.1400	-.1890	-.1880	-.0830	-.1130	-.0820	-.1130		
90.000		-.0930	-.1040	-.1570	-.1400	-.1470	-.1260	-.1460		
105.000				-.1690	-.2200	-.1730	-.1520	-.1700		
110.000									-.2470	
120.000		-.0440	.0570	-.1500	-.5400	-.2670	-.1620	-.1560	-.2190	
135.000				.4090	-.1370	-.3260	-.2110	-.2050		
150.000		-.0070	.1100	.3160	.0580	-.2480	-.1930	-.1940		
165.000		-.0240		.2150	.1460	-.2530	-.2350	-.2210		
180.000		-.0220	.0650	.1130						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB34)

MACH (1) = .599 BETA (5) = 8.310

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3266	.3953	.5126
PHI															
.000	.0000	.0000	.0000	-.7350	-.1340	-.0660			-.0670		-.0800	-.0650	-.0430	-.0390	-.0300
20.000	.0000		-.5450	-.6850	-.1250	-.0540			-.0570		-.0820				
40.000	.0000		-.5120	-.6110	-.1360	-.0520			-.0690		-.1440	-.1200	-.0630	-.0350	-.0060
55.000	.0000		-.5200	-.6240	-.1360	-.0770			-.1060		-.1490				
70.000	.0000		-.5280	-.6130	-.1570	-.0890			-.1370		-.2030	-.3990	-.1060	-.0270	-.0130
90.000	.0000	.2230	-.5290	-.5680	-.1510	-.1310			-.1890		-.2450	-.4160	-.0990	-.0350	-.0250
105.000	.0000														
110.000	.0000														
125.000	.0000		-.3600	-.3890	-.1420	-.1550			-.4340		-.3060	-.2880	-.1100	-.0460	-.0240
135.000	.0000														
142.000	.0000									-.8700					
150.000	.0000		-.1690	-.1670	-.0160	.0980			-.3870		-.4300	-.2060	-.1190	-.0600	-.0270
157.000	.0000							-.1370							
162.000	.0000								-.6070						
165.000	.0000										-.4710	-.1770	-.0300	-.1200	-.0950
169.000	.0000								-.4020						
172.000	.0000						.4440								
180.000	.0000	.5600	-.0360	.0230	.1390	.4*40			.0680		-.5670	.2120	.1750	-.1830	.1580

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0380							-.1270		-.1850
40.000	-.0030	-.0480		-.1100	-.1460	-.1900	-.1480			-.1950
70.000		-.1510	-.2210	-.2310	-.1190	-.1420	-.1080	-.1270		
90.000		-.1030	-.1380	-.2120	-.1860	-.1870	-.1520	-.1570		
105.000				-.2510	-.2890	-.2300	-.1880	-.1910		
110.000									-.2740	
120.000		-.0640	.0010	-.2950	-.7030	-.3300	-.2110	-.2010	-.2560	
135.000				.3920	-.2330	-.4790	-.3150	-.2750		
150.000		-.0550	.0310	.2050	.0250	-.3390	-.2780	-.2410		
165.000		-.0940		.1520	.0720	-.4230	-.3500	-.2270		
180.000		-.1410	-.0670	-.0130						

AMES 11-7U7 OA12 OPA ORBITER FUSELAGE (RBPB34)

MACH (2) = .899 BETA (1) = -8.1UU

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.0000	.0000	0000	-.717U	-.273U	-.037U			-.069U		-.146U	-.124U	-.071U	-.016U	.006U
25.000	.0000		-.122U	-.788U	-.244U	-.078U			-.087U		-.175U				
40.000	.0000		.116U	-.556U	-.208U	-.239U			-.263U		-.372U	-.401U	-.141U	-.064U	-.005U
55.000	.0000		.259U	-.265U	.052U	.089U			.067U		-.039U				
70.000	.0000		.321U	-.124U	.136U	.175U			.108U		-.036U	-.619U	.002U	.066U	.081U
90.000	.0000	.937U	.339U	-.045U	.216U	.212U			.125U		-.041U	-.738U	.007U	.051U	.040U
105.000	.0000														
110.000	.0000														
125.000	.0000		.334U	.092U	.291U	.341U			.196U		-.139U	-.804U	.008U	.029U	.017U
135.000	.0000														
142.000	.0000									-.434U					
150.000	.0000		.249U	.114U	.284U	.568U			.256U		-.572U	-.593U	-.029U	-.012U	.014U
157.000	.0000							.571U							
162.000	.0000								.148U						
165.000	.0000										-.537U	-.507U	-.029U	.017U	.024U
169.000	.0000								-.021U						
172.000	.0000						.759U								
180.000	.0000	.673U	.013U	.044U	.186U	.612U			.285U		-1.051U	-.485U	-.257U	-.115U	-.129U

X/LB	.5873	.6626	.738U	.7889	.8283	.8843	.9262	.9639	1.0015	1.0392
PHI										
.000	.016U							-.125U		-.166U
40.000	.006U	-.093U		-.169U	-.282U	-.413U	-.135U			-.179U
70.000		-.050U	-.117U	-.022U	.085U	.057U	.077U	.037U		
90.000		-.019U	-.010U	.081U	.046U	.017U	.038U	.027U		
105.000				.168U	-.025U	-.014U	.005U	.000U		
110.000									-.208U	
125.000		-.016U	.142U	.378U	-.129U	-.053U	.036U	.028U	-.134U	
135.000				.374U	.042U	-.057U	.041U	.003U		
150.000		.005U	.152U	.193U	-.056U	.023U	.079U	-.034U		
165.000		.025U		.229U	.166U	.103U	.076U	-.237U		
180.000		-.009U	.035U	.087U						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB34)

MACH (2) = .897 BETA (2) = -4.010

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.0000	.0000	.0000	-.6370	-.3240	-.0190			-.0610		-.1210	-.1240	-.0510	-.0050	.0280
20.000	.0000		-.1400	-.6890	-.1930	-.0440			-.0750		-.1390				
40.000	.0000		.0300	-.6920	-.1360	-.1290			-.1690		-.2580	-.3170	-.0700	-.0210	.0250
55.000	.0000		.1210	-.4820	.0080	.0550			.0020		-.0870				
70.000	.0000		.1510	-.3360	.0520	.1080			.0220		-.1010	-.0650	-.0210	.0360	.0540
90.000	.0000	.0250	.1540	-.2380	.1120	.1340			.0260		-.1300	-.0810	-.0100	.0260	.0220
105.000	.0000														
110.000	.0000														
120.000	.0000		.1780	-.0470	.1980	.2610			.0580		-.1940	-.0380	-.0040	.0110	.0260
135.000	.0000									-.7580					
142.000	.0000														
150.000	.0000		.1530	.0520	.2540	.5310			.1990		-.5780	-.5630	-.0310	.0420	.0170
157.000	.0000							.5050							
162.000	.0000								.0850						
165.000	.0000										-.8220	-.4110	-.0360	.0120	.0250
169.000	.0000								-.0110						
172.000	.0000						.7780								
80.000	.0000	6910	-.0010	.0570	2230	5640			.3070		1.1730	.3420	.1470	-.0200	.0480
X/LB	5873	.6626	.7230	.7869	8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	0240							-.1040		-.1530					
40.000	.0370	-.0580		-.1520	-.2550	-.3940	-.2020			-.1650					
70.000		-.0840	-.1480	-.1280	-.0340	-.0430	.0220	-.0480							
90.000		-.0470	-.0400	-.0300	-.0890	-.0940	-.0160	-.0210							
105.000				.0440	-.1550	-.1160	-.0370	-.0490							
110.000									-.2220						
120.000		-.0170	.1290	.2350	-.3220	-.1560	-.0180	-.0280	-.1510						
135.000				.4140	.0200	-.1490	-.0200	-.0440							
150.000		.0090	.1550	.2480	.0060	-.0940	-.0220	-.0930							
165.000		.0150		.2360	.1710	-.0290	-.0290	-.2540							
180.000		-.0250	.0870	.1480											

AMES 11-7D7 OA12 OEA ORBITER FUSELAGE (RBPB34)

MACH (2) = .890 BETA (3) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.00	.0000	.0000	.0000	-.6110	-.3300	-.0130			-.0550		-.1120	-.1120	-.0490	-.0010	.0270
20.00	.0000		-.1850	-.6930	-.2290	-.0240			-.0610		-.1330				
40.00	.0000		-.0650	-.7580	-.0960	-.0670			-.1120		-.2070	-.2400	-.0450	.0020	.0370
55.00	.0000		-.0170	-.7060	-.0120	.0230			-.0510		-.1440				
70.00	.0000		-.0070	-.5820	.0040	.0480			-.0490		-.1860	-.6920	-.0430	.0220	.0360
90.00	.0000	.6990	-.0190	-.4910	.0350	.0620			-.0660		-.2280	-.7990	-.0560	.0170	.0130
105.00	.0000														
110.00	.0000														
120.00	.0000		.0370	-.1950	.1080	.1710			-.0780		-.3580	-.8310	-.0160	.0140	.0270
135.00	.0000														
142.00	.0000									-1.0720					
150.00	.0000		.0780	-.0240	.2030	.4680			.1310		-.7650	-.4420	-.0330	.0100	.0160
157.00	.0000							.4050							
162.00	.0000								-.0430						
165.00	.0000										-.8960	-.3760	-.0430	.0180	.0190
169.00	.0000								-.0150						
172.00	.0000						.7640								
180.00	.0000	.7080	.0120	.0620	.2390	.6770			.3210		-.6940	-.4860	-.0210	.0080	.0170

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.00	.0270							-.1040		-.1550
40.00	.0480	-.0310		-.1400	-.2320	-.3720	-.2470			-.1780
70.00		-.0360	-.1580	-.1880	-.1400	-.1870	-.0300	-.0410		
90.00		-.0300	-.0520	-.1050	-.2180	-.2510	-.0650	-.0530		
105.00				-.0610	-.2940	-.3470	-.0810	-.0780		
110.00									-.2520	
120.00		-.0120	.1170	.0770	-.4670	-.4140	-.0800	-.0760	-.1670	
135.00				.4640	-.0130	-.3700	-.1170	-.1030		
150.00		.0170	.1550	.3010	.0570	-.2680	-.1300	-.1370		
165.00		.0200		.2580	.1630	-.1840	-.1450	-.2420		
180.00		.0210	.1220	.1660						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB34)

MACH (2) = .896 BETA (4) = 4.250

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.6310	-.3330	-.0180			-.0650		-.1210	-.1200	-.0470	-.0110	.0240
20.000	.0000		-.2250	-.6940	-.2880	-.0180			-.0680		-.1310				
40.000	.0000		-.1640	-.7610	-.0690	-.0280			-.0610		-.2030	-.2070	-.0410	.0000	.0410
55.000	.0000		-.1490	-.7970	.0000	-.0040			-.0840		-.2430				
70.000	.0000		-.1590	-.7500	.0150	.0080			-.1040		-.3430	-.6800	-.0640	.0120	.0360
90.000	.0000	.5640	-.1740	-.6910	-.0160	-.0020			-.1360		-.4200	-.7580	-.0640	.0120	.0180
105.000	.0000														
110.000	.0000														
120.000	.0000		-.1070	-.4030	.0120	.0720			-.2090		-.5610	-.6420	-.0740	.0070	.0180
135.000	.0000														
142.000	.0000									-1.1700					
150.000	.0000		-.0070	-.1180	.1270	.3780			.0470		-.6240	-.4780	-.1180	.0250	.0150
157.000	.0000							.2890							
162.000	.0000								-.1100						
165.000	.0000										-.6810	-.5440	-.0560	.0210	-.0020
169.000	.0000								-.0410						
172.000	.0000						.7110								
180.000	.0000	.7020	.0090	.0580	.2250	.6580			.3010		-.8710	-.4940	-.1040	-.0170	-.0090

X/LB	.5873	.6626	.7380	.7869	.8283	.8648	.9262	.9639	1.0015	1.0392
PHI										
.000	.0180							-.1040		-.1570
40.000	.0460	-.0170		-.1340	-.2130	-.3640	-.2450			-.1810
70.000		-.0870	-.1530	-.2290	-.2080	-.4270	-.1140	-.0930		
90.000		-.0430	-.0800	-.1720	-.2920	-.4870	-.1410	-.0980		
105.000				-.1470	-.3820	-.5010	-.1750	-.1270		
110.000									-.2730	
120.000		-.0100	.0690	-.0800	-.5870	-.5550	-.1680	-.1320	-.2070	
135.000				.4320	-.0370	-.6450	-.2870	-.1810		
150.000		.0170	.1330	.2920	.0960	-.4060	-.3900	-.1780		
165.000		.0000		.2410	.1670	-.3630	-.3670	-.2540		
180.000		-.0110	.0920	.1440						

AMES 11-7DT OA12 OEA ORBITER FUSELAGE (RBPB34)

MACH (2) = .901 BETA (5) = 8.430

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.0000	.0000	.0000	-.7150	-.3090	-.0410			-.0710		-.1500	-.1490	-.0720	-.0280	.0040
20.000	.0000		-.2740	-.7170	-.3290	-.0220			-.0640		-.1610				
40.000	.0000		-.2550	-.7010	-.2650	-.0240			-.0790		-.2470	-.2540	-.0770	-.0250	.0240
55.000	.0000		-.2760	-.7070	-.2390	-.0290			-.1080		-.2940				
70.000	.0000		-.3050	-.7120	-.2280	-.0250			-.1390		-.4200	-.7360	-.0790	.0090	.0370
90.000	.0000	.4240	-.3140	-.6970	-.1210	-.0550			-.1950		-.5080	-.7690	-.0830	.0160	.0210
105.000	.0000														
110.000	.0000														
120.000	.0000		-.2280	-.5900	-.1120	-.0380			-.3340		-.6570	-.5210	-.1460	.0160	.0180
135.000	.0000														
142.000	.0000									-1.2380					
150.000	.0000		-.0840	-.2290	.0270	.2610			-.0540		-.7070	-.5680	-.2170	.0140	-.0190
157.000	.0000							.1170							
162.000	.0000								-.2180						
165.000	.0000										-.6620	-.5940	-.0190	-.0490	-.0590
169.000	.0000								-.0720						
172.000	.0000						.6210								
180.000	.0000	.0850	.0050	.0240	.1830	.5990			.2020		-.9000	-.5280	-.2110	-.0960	-.1220

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0010							-.1180		-.1680
40.000	.0380	-.0250		-.1210	-.2050	-.3350	-.2900			-.2150
70.000		-.0800	-.1490	-.2400	-.2340	-.5130	-.2950	-.1240		
90.000		-.0410	-.0680	-.1910	-.3290	-.5290	-.4550	-.1420		
105.000				-.1750	-.4580	-.5490	-.5270	-.1830		
110.000									-.2810	
120.000		-.0150	.0780	-.1160	-.6600	-.6180	-.5900	-.2310	-.2190	
135.000				.4800	-.1280	-.7820	-.6820	-.5670		
150.000		-.0580	.0480	.1630	.0180	-.4320	-.5900	-.4700		
165.000		-.0870		.1780	.1300	-.4540	-.5050	-.3130		
180.000		-.0810	.0380	.0940						

AMES 11-7D7 OA12 O2A ORBITER FUSELAGE (RBPB35) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000
ELEVON = .000 RUDFLR = 40.000

MACH (1) = .598 BETA (1) = -8.040

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.5120	-.0580	-.0040			-.0100		-.0300	-.0330	-.0080	.0120	.0320
20.000	.0000		-.0880	-.4370	-.0850	-.0160			-.0190		-.0400				
40.000	.0000		.1540	-.2210	-.0040	-.0480			-.0500		-.0870	-.0610	-.0460	.0310	.0660
55.000	.0000		.2620	-.0760	.1290	.1410			.1090		.0290				
70.000	.0000		.2810	-.0210	.1430	.1570			.1030		-.0190	-.0370	-.0670	-.0650	-.0220
90.000	.0000	.8130	.2260	-.0260	.1750	.1660			.1120		-.0640	-.0960	-.0950	-.0420	-.0730
105.000	.0000														
110.000	.0000														
120.000	.0000		.1130	-.0040	.1770	.2180			.1680		-.2800	-.3260	-.1420	-.1150	-.1160
135.000	.0000														
142.000	.0000									-.3720					
150.000	.0000		-.0230	-.0410	.1290	.3820			-.0690		-.6620	-.2270	-.1310	-.0550	-.0220
157.000	.0000							.3310							
162.000	.0000								-.2120						
165.000	.0000										-.4190	-.1620	-.0900	-.0670	-.0620
169.000	.0000								-.3880						
172.000	.0000						.5260								
180.000	.0000	.3510	-.2600	-.1050	.0420	.4160			-.0290		-.6270	-.2490	-.2230	-.2200	-.0960

X/LB	.973	.6626	7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0330							-.1040		-.1720
40.000	.0620	.0070		-.0790	-.1420	-.1710	-.1180			-.1600
70.000		-.1900	-.1450	-.0480	.1050	.0380	.0340	-.0190		
90.000		-.1470	-.0550	.0540	.0940	-.0090	-.0110	-.0610		
105.000				.1620	.0530	-.0170	-.0360	-.0900		
110.000								-.1970		
120.000		-.1230	.0730	.3720	-.0490	-.0800	-.0330	-.0490	-.1440	
135.000				.1810	-.0810	-.1510	-.0710	-.1150		
150.000		-.0700	.0510	.0430	-.1700	-.0610	-.0110	-.1030		
165.000		-.0470		.0950	.0070	.0340	.0410	-.2090		
180.000		-.1390	-.0660	-.0490						

AMES 11-7X7 OA12 OEA ORBITER FUSELAGE (RBPB35)

MACH (1) = .999 BETA (2) = -3.980

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3266	.3953	.5126
PHI															
.000	.0000	.0000	.0000	-.4870	-.0320	.0120			.0020		-.0150	-.0170	.0100	.0220	.0430
20.000	.0000		-.0970	-.4250	-.0460	.0060			.0020		-.0250				
40.000	.0000		.0590	-.2730	.0040	.0000			-.0050		-.0590	-.0470	.0090	.0350	.0710
55.000	.0000		.1230	-.1910	.0710	.0800			.0450		-.0270				
70.000	.0000		.1050	-.1600	.0470	.0650			.0310		-.0810	-.3680	-.1050	-.0480	-.0540
90.000	.0000	.0910	.0360	-.1700	.0880	.0920			.0230		-.1310	-.4520	-.1160	-.0660	-.0880
105.000	.0000														
110.000	.0000														
120.000	.0000		-.0250	-.1060	.1110	.1520			.0490		-.3120	-.3270	-.1380	-.0900	-.0820
133.000	.0000														
142.000	.0000									-.4430					
150.000	.0000		-.0680	-.0730	.1110	.3550			-.1490		-.6210	-.2150	-.1190	-.0780	-.0650
157.000	.0000							.2700							
162.000	.0000								-.2990						
165.000	.0000										-.4500	-.1830	-.0950	-.0570	-.0550
169.000	.0000								-.4020						
172.000	.0000						.5550								
180.000	.0000	.3720	-.2570	-.0910	.0800	.4680			.0050		-.5680	-.1890	-.1640	-.0990	-.1060

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0410							-.1010		-.1710
40.000	.0750	.0230		-.0670	-.1270	-.1710	-.1240			-.1670
70.000		-.2380	-.2010	-.1170	.0350	-.0180	-.0080	-.0520		
90.000		-.1770	-.0960	-.0290	-.0010	-.0680	-.0540	-.0870		
105.000				.0470	-.0400	-.0820	-.0820	-.1170		
110.000									-.1970	
120.000		-.1150	.0610	.2500	-.1700	-.1370	-.0690	-.0840	-.1650	
135.000				.2780	-.0700	-.1670	-.0740	-.1225		
150.000		-.0590	.0720	.1070	-.1090	-.1230	-.0690	-.1360		
165.000		-.0480		.1160	.0940	-.0490	-.0780	-.2090		
180.000		-.0710	.0190	.0570						

AMES 11-7ft OA12 OBA ORBITER FUSELAGE (RBPB35)

MACH (1) = .999 BETA (3) = .080

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.0000	.0000	.0000	-.4890	-.0300	.0200			.0060		-.0110	-.0120	.0120	.0260	.0490
20.000	.0000		-.1490	-.4340	-.0350	.0140			.0060		-.0190				
40.000	.0000		-.0620	-.3380	-.0200	.0220			.0050		-.0630	-.0630	-.0040	.0270	.0660
55.000	.0000		-.0440	-.3050	-.0420	.0230			-.0120		-.0810				
70.000	.0000		-.0830	-.2920	-.0360	.0200			-.0290		-.1370	-.4020	-.1350	-.0610	-.0650
90.000	.0000	.5560	-.1520	-.3020	.0090	.0230			-.0440		-.1820	-.4720	-.1350	-.0700	-.0680
105.000	.0000														
110.000	.0000														
120.000	.0000		-.1640	-.2010	.0460	.0810			-.0740		-.3300	-.3180	-.1230	-.0690	-.0660
135.000	.0000														
142.000	.0000									-.5050					
150.000	.0000		-.1560	-.1190	.0850	.3020			-.2300		-.5690	-.2050	-.1020	-.0590	-.0460
157.000	.0000							.1720							
162.000	.0000								-.4000						
165.000	.0000										-.4680	-.1810	-.0990	-.0510	-.0420
169.000	.0000								-.4270						
172.000	.0000						.5430								
180.000	.0000	.3930	-.2310	-.0740	.0980	.4860			.0160		-.5420	-.1610	-.1100	-.0550	-.0420

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0460							-.1050		-.1640
40.000	.0710	.0360		-.0540	-.1110	-.1660	-.1210			-.1700
70.000		-.2520	-.2400	.1760	-.0350	-.0740	-.0510	-.0780		
90.000		-.1850	-.1290	-.1090	-.0880	-.1180	-.0960	-.1100		
105.000				-.0820	-.1260	-.1320	-.1200	-.1450		
110.000									-.2130	
120.000		-.0970	.0510	.0690	-.3130	-.1970	-.1050	-.1100	-.1830	
135.000				.3330	-.0760	-.2120	-.1170	-.1390		
150.000		-.0460	.0850	.1930	-.0350	-.1850	-.1360	-.1700		
165.000		-.0390		.1610	.0850	-.1370	-.1540	-.2020		
180.000		-.0300	.0510	.0690						

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBP835)

MACH (1) = .599 BETA (4) = 4.170

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.0000	.0000	.0000	-.4950	-.0400	.0100			.0080		-.0180	-.0110	.0110	.0230	.0410
20.000	.0000		-.2180	-.4570	-.0460	.0080			.0070		-.0290				
40.000	.0000		-.1840	-.4070	-.0520	.0080			-.0130		-.1120	-.1000	-.0380	-.0090	.0430
55.000	.0000		-.2090	-.4200	-.0630	-.0350			-.0680		-.1300				
70.000	.0000		-.2650	-.4180	-.0970	-.0300			-.0820		-.1790	-.4270	-.1510	-.0850	-.0790
90.000	.0000	.3940	-.3380	-.4260	-.0580	-.0360			-.1060		-.2090	-.4740	-.1290	-.0770	-.0690
105.000	.0000														
110.000	.0000														
120.000	.0000		-.3180	-.3130	-.0320	-.0080			-.2030		-.3340	-.3040	-.1090	-.0630	-.0510
135.000	.0000														
142.000	.0000									-.6080					
150.000	.0000		-.2470	-.1940	.0260	.2170			-.3340		-.5130	-.1920	-.0980	-.0570	-.0410
157.000	.0000							.0340							
162.000	.0000								-.5460						
165.000	.0000										-.4760	-.1660	-.1000	-.0500	-.0440
169.000	.0000								-.4800						
172.000	.0000						.4860								
180.000	.0000	.3080	-.2360	-.0890	.0820	.4580			-.0690		-.5620	-.1740	-.1440	-.0850	-.1020

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0360							-.1110		-.1680
40.000	.0630	.0290		-.0440	-.1000	-.1580	-.1320			-.1810
70.000		-.2740	-.2750	-.2260	-.1040	-.1210	-.0900	-.1040		
90.000		-.2000	-.1670	-.1930	-.1690	-.1660	-.1280	-.1430		
105.000				-.1910	-.2190	-.1940	-.1550	-.1750		
110.000									-.2540	
120.000		-.1050	.0040	-.1270	-.4840	-.2580	-.1550	-.1480	-.2090	
135.000				.3710	-.1470	-.3070	-.1950	-.1860		
150.000		-.0540	.0580	.2300	-.0170	-.2820	-.2130	-.2040		
165.000		-.0510		.1640	.0800	-.2750	-.2520	-.2150		
180.000		-.0700	.0170	.0570						

AMES 11-7D7 OA12 OEA ORBITER FUSELAGE (RBPB35)

MACH (1) = .600 BETA (5) = 8.260

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3256	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.5160	-.0610	-.0090			-.0090		-.0330	-.0240	-.0090	.0060	.0250
25.000	.0000		-.2920	-.4920	-.0580	-.0130			-.0150		-.0520				
40.000	.0000		-.3180	-.4850	-.1020	-.0380			-.0650		-.1860	-.1740	-.1080	-.0480	-.0160
55.000	.0000		-.3930	-.5400	-.1250	-.0960			-.1180		-.1670				
70.000	.0000		-.4610	-.5630	-.1640	-.0810			-.1230		-.2120	-.4380	-.1620	-.0980	-.0890
90.000	.0000	.2280	-.5330	-.5720	-.1170	-.0990			-.1540		-.2450	-.4730	-.1310	-.0710	-.0850
105.000	.0000														
110.000	.0000														
120.000	.0000		-.4680	-.4370	-.1090	-.0890			-.3250		-.3470	-.3010	-.1070	-.0560	-.0530
135.000	.0000									-.0950					
142.000	.0000														
150.000	.0000		-.3345	-.2720	-.0510	.1070			-.4300		-.4830	-.2100	-.1120	-.0770	-.0551
157.000	.0000							-.1390							
162.000	.0000								-.7030						
165.000	.0000										-.4910	-.1920	-.1100	-.0640	-.0960
169.000	.0000								-.5440						
172.000	.0000						.3960								
180.000	.0000	.9720	-.2640	-.1210	.0430	.3990			-.0600		-.6140	-.2320	-.1990	-.0810	-.1080
X/LB	.5973	.6626	.7380	.7969	.8283	.8849	.9262	.9659	1.0015	1.0392					
PHI															
.000	.0230							-.1110		-.1760					
40.000	.0380	.0180		-.0370	-.0950	-.1520	-.1320			-.1990					
70.000		-.2830	-.3070	-.2830	-.1610	-.1610	-.1210	-.1230							
90.000		-.2040	-.2120	-.2540	-.2190	-.2050	-.1640	-.1580							
105.000				-.2660	-.3010	-.2390	-.1920	-.1950							
110.000									-.2710						
120.000		-.1250	-.0240	-.2220	-.6410	-.3260	-.2040	-.1850	-.2380						
135.000				.3710	-.2030	-.4190	-.2740	-.2360							
150.000		-.0810	.0210	.1950	-.0890	-.3870	-.3030	-.2500							
165.000		-.1250		.1230	.0150	-.4740	-.3770	-.2410							
180.000		-.1920	-.0760	-.0490											

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBPB35)

MACH (2) = .903 BETA (1) = -8.160

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.7000	.0090	.0260			-.0020		-.0660	-.0830	-.0530	.0220	.0600
20.000	.0000		.0900	-.6340	-.0620	.0690			-.0040		-.0820				
40.000	.0000		.2780	-.3330	.0020	-.0320			-.0030		-.1490	-.1930	-.0490	.0360	.0890
55.000	.0000		.3660	-.1450	.1660	.1840			.1450		.0300				
75.000	.0000		.3740	-.0680	.1760	.2150			.1610		-.0010	-.5830	-.1080	.0190	.0270
90.000	.0000	.9340	.3070	-.0650	.2140	.2410			.1750		-.0330	-.7230	-.1130	-.0130	-.0330
105.000	.0000														
110.000	.0000														
125.000	.0000		.1800	-.0280	.2260	.3280			.2720		-.2010	-.8380	-.1030	-.0690	-.0670
135.000	.0000														
142.000	.0000									-.4950					
150.000	.0000		.0350	-.0920	.1900	.5240			.1990		-.7010	-.6860	-.0730	-.0520	-.0300
157.000	.0000							.5290							
162.000	.0000								.0730						
165.000	.0000										-.5760	-.5470	-.0460	-.0250	-.0040
169.000	.0000								-.1420						
172.000	.0000						.7130								
180.000	.0000	.5080	-.2280	-.1980	.1030	.5720			.1980		-1.1210	-.4830	-.3280	-.1820	-.1070

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0800							-.1350		-.1550
40.000	.1220	.0810		-.0580	-.1800	-.3170	-.1830			-.1700
70.000		-.2400	-.3500	-.1060	.0680	.0590	.0640	.0600		
90.000		-.2050	-.2000	.0180	.0120	.0070	.0470	.0430		
105.000				.1160	-.0300	-.0240	.0170	.0110		
110.000									-.2000	
120.000		-.1930	.0190	.3920	-.1730	-.0740	.0270	.0280	-.1250	
135.000				.2660	-.0680	-.1210	-.0060	-.0310		
150.000		-.1100	.0620	.0780	-.1830	-.0440	.0310	-.0590		
165.000		-.0830		.1230	.0090	.0200	.0260	-.2440		
180.000		-.1350	-.0180	.0300						

AMES 11-7D7 OA12 O2A ORBITER FUSELAGE (RBPB35)

MACH (2) = .902 BETA (2) = -4.040

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1906	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.6100	.0500	.0450			.0150		-.0500	-.0730	-.0310	.0320	.0850
20.000	.0000		.0590	-.6760	-.0100	.0330			.0150		-.0610				
40.000	.0000		.1870	-.4910	.0220	.0310			.0030		-.1030	-.1660	-.0380	.0480	.1010
55.000	.0000		.2270	-.3300	.1020	.1320			.0830		-.0350				
70.000	.0000		.2060	-.2530	.0910	.1480			.0830		-.0820	-.6310	-.1290	-.0060	.0000
90.000	.0000	.8220	.1280	-.2420	.1370	.1730			.0920		-.1260	-.7660	-.1380	-.0190	-.0400
105.000	.0000														
110.000	.0000														
120.000	.0000		.0360	-.1690	.1680	.2710			.1540		-.2500	-.8720	-.1490	-.0350	-.0430
135.000	.0000														
142.000	.0000									-.7130					
150.000	.0000		-.0470	-.1940	.1740	.5030			.1540		-.6920	-.6490	-.0800	-.0150	.0160
157.000	.0000							.4810							
162.000	.0000								.0190						
165.000	.0000										-.8290	-.4750	-.0470	.0060	-.0340
169.000	.0000								-.1230						
172.000	.0000						.7390								
180.000	.0000	.5170	-.2370	-.1820	.1460	.6180			.2170		-.2390	-.0170	.1810	-.0370	.1530

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0950							-.1260		-.1460
40.000	.1290	.0650		-.0370	-.1470	-.3020	-.2480			-.1690
70.000		-.2770	-.3530	-.2040	-.0700	-.0250	.0330	.0180		
90.000		-.2250	-.2030	-.0770	-.1570	-.0740	-.0080	.0040		
105.000				.0050	-.2190	-.1070	-.0360	-.0280		
110.000									-.2070	
120.000		-.1710	.0240	.2730	-.3370	-.1350	-.0190	-.0150	-.1450	
135.000				.3370	-.0830	-.1520	-.0410	-.0520		
150.000		-.0910	.0690	.1310	-.1230	-.1410	-.0500	-.1000		
165.000		-.0790		.1460	.0640	-.0980	-.0800	-.2330		
180.000		-.0900	.0180	.0760						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7X7 OA12 OBA ORBITER FUSELAGE (PBPB35)

MACH (2) = .904 BETA (3) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3254	.3953	.5125
PHI															
.00	.0000	.0000	.0000	-.5980	.0180	.0450			.0180		-.0570	-.0780	-.0480	.0350	.0750
2.00	.0000		.0150	-.6200	.0230	.0430			.0190		-.0720				
4.00	.0000		.0810	-.6130	.0250	.0490			.0150		-.1150	-.1720	-.0560	.0280	.0890
55.00	.0000		.0870	-.5920	.0560	.0780			.0230		-.1130				
7.00	.0000		.0460	-.5060	.0340	.0910			.0170		-.1840	-.6650	-.1450	-.0210	-.0110
9.00	.0000	.6990	-.0350	-.4740	.0760	.1110			.0160		-.2240	-.7880	-.1960	-.0130	-.0370
105.00	.0000														
110.00	.0000														
120.00	.0000		-.0930	-.3860	.1150	.2060			.0290		-.4460	-.8980	-.1320	-.0450	-.0150
135.00	.0000									-.9990					
142.00	.0000														
150.00	.0000		-.1110	-.2910	.1480	.4570			.1010		-.8280	-.5810	-.0470	.0120	-.0030
157.00	.0000							.3970							
162.00	.0000								-.0540						
165.00	.0000										-.9120	-.4990	-.0570	.0300	.0060
169.00	.0000								-.1130						
172.00	.0000						.7300								
180.00	.0000	.5300	-.2290	-.1770	.1620	.6350			.2280		-.5910	-.5950	-.1690	.1140	-.0620

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.00	.0990							-.1170		-.1450
4.00	.1240	.0910		-.0260	-.1310	-.2870	-.3340			-.1750
7.00		-.2840	-.3260	-.2580	-.1750	-.2290	-.1270	-.0220		
9.00		-.2190	-.1840	-.1470	-.2800	-.4120	-.0450	-.0390		
105.00				-.0950	-.3270	-.4720	-.0600	-.0740		
110.00									-.2330	
120.00		-.1340	.0310	.0850	-.4360	-.5500	-.1490	-.0860	-.1690	
135.00				.3460	-.0780	-.5430	-.0950	-.1420		
150.00		-.0760	.0710	.2160	-.1440	-.4050	-.1550	-.1530		
165.00		-.0670		.1720	.0830	-.2930	-.1980	-.2320		
180.00		-.0610	.0380	.0870						

AMES 11-7D7 OA12 O2A ORBITER FUSELAGE (RBPB35)

MACH (2) = .902 BETA (4) = 4.220

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.6170	.0290	.0390			.0150		-.0600	-.0830	-.0400	.0290	.0720
20.000	.0000		-.0380	-.6310	.0290	.0360			.0160		-.0760				
40.000	.0000		-.0220	-.6990	.0300	.0430			.0030		-.1510	-.1960	-.1020	.0040	.0720
55.000	.0000		-.0490	-.7160	.0230	.0260			-.0290		-.1840				
70.000	.0000		-.1100	-.6400	.0120	.0410			-.0350		-.2670	-.6840	-.1460	-.0480	-.0150
90.000	.0000	.5660	-.1910	-.6000	.0450	.0550			-.0480		-.3340	-.7910	-.1560	-.0260	-.0270
105.000	.0000														
110.000	.0000														
120.000	.0000		-.2290	-.5320	.0470	.1300			-.0990		-.5400	-.7420	-.1560	-.0040	-.0080
135.000	.0000														
142.000	.0000									-1.1110					
150.000	.0000		-.1940	-.3790	.0940	.3820			.0210		-.5910	-.5570	-.2210	.0270	.0070
157.000	.0000							.2740							
162.000	.0000								-.1580						
165.000	.0000										-.6330	-.5630	-.1490	.0270	.0020
169.000	.0000								-.1340						
172.000	.0000						.6760								
180.000	.0000	.5270	-.2320	-.1710	.1430	.6130			.2070		-1.2000	-.3940	-.1990	-.0370	-.0520

X/LB	.5873	.6626	.7580	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0890							-.1200		-.1530
40.000	.1100	.0870		-.0220	-.1170	-.2820	-.3390			-.1850
70.000		-.2790	-.2850	-.3050	-.2760	-.4960	-.1960	-.0770		
90.000		-.1980	-.1680	-.2300	-.3650	-.5310	-.1450	-.1010		
105.000				-.1960	-.4150	-.5370	-.1670	-.1230		
1..0.000									-.2690	
120.000		-.1150	.0000	-.1140	-.5620	-.6000	-.1720	-.1120	-.2010	
135.000				.3180	-.0980	-.6470	-.3030	-.1480		
150.000		-.0610	.0590	.2420	.0250	-.4580	-.3890	-.1740		
165.000		-.0670		.1680	.0920	-.4000	-.3710	-.2420		
180.000		-.0910	.0200	.0670						

AMES 11-7D7 OA12 OBA ORBITER FUSELAGE (RBPB35)

MACH (2) = .898 BETA (5) = 8.370

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.6900	.0230	.0190			-.0040		-.0740	-.0920	-.0480	.0080	.0540
20.000	.0000		-.0960	-.6820	.0090	.0220			-.0030		-.0900				
40.000	.0000		-.1270	-.7720	-.0080	.0130			-.0350		-.2180	-.2530	-.1680	-.0420	.0440
55.000	.0000		-.1910	-.7310	-.0560	-.0160			-.0720		-.2370				
70.000	.0000		-.2620	-.7520	-.1370	.0050			-.0810		-.3200	-.7250	-.1570	-.0630	-.0210
90.000	.0000	.4250	-.3360	-.6370	-.1320	.0100			-.1080		-.3920	-.7680	-.1530	-.0280	-.0240
105.000	.0000														
110.000	.0000														
120.000	.0000		-.3450	-.6400	-.0440	.0450			-.2120		-.5270	-.5400	-.2500	.0040	-.0030
135.000	.0000														
142.000	.0000									-.9820					
150.000	.0000		-.2650	-.4480	.0130	.2800			-.0780		-.6920	-.5490	-.3130	.0150	-.0180
157.000	.0000							.1240							
162.000	.0000								-.2650						
165.000	.0000										-.6430	-.5390	-.2160	-.0160	-.0410
169.000	.0000								-.1610						
172.000	.0000						.5870								
180.000	.0000	.5210	-.2370	-.1670	.0990	.5580			.1730		-1.1380	-.4700	-.2830	-.1260	-.1230

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0730							-.1230		-.1630
40.000	.0780	.0680		-.0220	-.1040	-.2720	-.2570			-.2060
70.000		-.2500	-.2750	-.3200	-.3060	-.5600	-.1850	-.1120		
90.000		-.1820	-.1650	-.2570	-.4000	-.5640	-.2590	-.1160		
105.000				-.2290	-.4840	-.5660	-.3650	-.1420		
110.000								-.2810		
120.000		-.1040	-.0050	-.1390	-.6290	-.6480	-.5740	-.1260	-.2100	
135.000				.3890	-.0370	-.6980	-.5890	-.1600		
150.000		-.0980	.0150	.1310	-.1960	-.5280	-.6120	-.3540		
165.000		-.1040		.1310	.0630	-.5000	-.5310	-.2900		
180.000		-.1350	-.0180	.0300						

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBPB36) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 10.000 RUDDER = .000
ELEVON = .000 RUDFLR = 40.000

MACH (1) = .598 BETA (1) = -8.070

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.3120	.0360	.0690			.0540		.0360	.0300	.0550	.0700	.0990
20.000	.0000		.1680	-.2170	.0450	.0770			.0670		.0400				
40.000	.0000		.3470	-.0330	.1270	.1110			.0990		.0460	.0510	.0950	.1180	.1590
55.000	.0000		.3850	.0380	.1870	.1690			.1320		.0520				
70.000	.0000		.3280	.0160	.1280	.1570			.1090		-.0170	-.3300	-.1260	-.0680	-.0930
90.000	.0000	.7790	.1820	-.0640	.1510	.1470			.0970		-.0990	-.4720	-.1730	-.1360	-.1820
105.000	.0000														
110.000	.0000														
120.000	.0000		-.0410	-.1210	.0950	.1650			.1980		-.4040	-.4300	-.2440	-.2150	-.2810
135.000	.0000														
142.000	.0000									-.4600					
150.000	.0000		-.2280	-.1910	.0280	.3170			-.1640		-.8120	-.2780	-.1760	-.1310	-.1850
157.000	.0000							.2610							
162.000	.0000								-.3350						
165.000	.0000										-.4690	-.2180	-.1410	-.1240	-.1210
169.000	.0000								-.5450						
172.000	.0000						.4660								
180.000	.0000	.1360	-.4890	-.2620	-.0400	.3620			-.1480		-.6570	-.2540	-.2710	-.1560	-.1820

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1080							-.0710		-.1530
40.000	.1680	.1350		.0150	-.0590	-.1160	-.0820			-.1440
70.000		-.3270	-.2180	-.0780	.0920	.0410	.0410	-.0150		
90.000		-.2680	-.1160	.0290	.0890	-.0100	-.0160	-.0540		
105.000				.1600	.0610	-.0210	-.0360	-.0850		
110.000									-.1910	
120.000		-.2430	-.0040	.3850	-.0350	-.1010	-.0510	-.0620	-.1510	
135.000				.0430	-.1900	-.2360	-.1340	-.1660		
150.000		-.1360	-.0130	-.0330	-.2610	-.1000	-.0380	-.1200		
165.000		-.1310		.0150	.0190	-.0100	-.0220	-.2050		
180.000		-.1610	-.0790	-.0650						

AMES 11-7D7 OA12 O2A ORBITER FUSELAGE (RBPB36)

MACH (1) = .598 BETA (2) = -3.990

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.2770	.0640	.0920			.0740		.0530	.0500	.0670	.0870	.1130
20.000	.0000		.1540	-.2050	.0700	.0940			.0900		.0520				
40.000	.0000		.2520	-.0940	.1100	.1230			.1060		.0220	.0120	.0680	.1050	.1410
55.000	.0000		.2400	-.0840	.1060	.0910			.0570		-.0250				
70.000	.0000		.1560	-.1220	.0290	.0870			.0370		-.0920	-.3940	-.1730	-.1110	-.1320
90.000	.0000	.6580	.0030	-.1960	.0740	.0840			.0300		-.1520	-.5160	-.2070	-.1490	-.1880
105.000	.0000														
110.000	.0000														
120.000	.0000		-.1720	-.2000	.0540	.1240			.1000		-.4200	-.4120	-.2160	-.1740	-.1900
135.000	.0000														
142.000	.0000									-.5160					
150.000	.0000		-.2930	-.2380	.0300	.3120			-.2240		-.7430	-.2510	-.1500	-.1090	-.1140
157.000	.0000							.2120							
162.000	.0000								-.4020						
165.000	.0000										-.4730	-.2100	-.1300	-.0830	-.1030
169.000	.0000								-.5470						
172.000	.0000						.4910								
180.000	.0000	.1480	-.4700	-.1790	.0050	.4120			-.1140		-.5840	-.1350	-.1580	-.1420	-.1150

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1240							-.0760	-.1560	
40.000	.1660	.1460		.0310	-.0400	-.1070	-.0790		-.1470	
70.000		-.3920	-.3030	-.1730	.0080	-.0270	-.0030	-.0370		
90.000		-.2870	-.1650	-.0570	-.0070	-.0670	-.0460	-.0720		
105.000				.0480	-.0400	-.0800	-.0810	-.1080		
110.000									-.2020	
120.000		-.2080	.0050	.2750	-.1600	-.1450	-.0760	-.0780	-.1590	
135.000				.1840	-.1460	-.2060	-.1140	-.1380		
150.000		-.1210	.0130	.0370	-.1900	-.1480	-.0850	-.1380		
165.000		-.1140		.0560	.0230	-.0950	-.1110	-.1950		
180.000		-.0970	-.0190	.0220						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB36)

MACH (1) = .599 BETA (3) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.0000	.0000	.0000	-.2750	.0370	.0970			.0820		.0610	.0600	.0780	.0940	.1270
20.000	.0000		.1100	-.2270	.0740	.0970			.0840		.0450				
40.000	.0000		.1430	-.1730	.0740	.0990			.0740		-.0350	-.0500	.0220	.0650	.1230
55.000	.0000		.0890	-.2220	.0150	.0910			-.0300		-.0970				
70.000	.0000		-.0370	-.2670	-.0660	.0170			-.0320		-.1470	-.4420	-.2070	-.1540	-.1630
90.000	.0000	.5190	-.1920	-.3290	-.0045	.0260			-.0380		-.2020	-.5470	-.2110	-.1580	-.1860
105.000	.0000														
110.000	.0000														
120.000	.0000		-.3150	-.2910	.0030	.0760			-.0140		-.4340	-.3780	-.1900	-.1410	-.1450
135.000	.0000									-.5650					
142.000	.0000								-.3000		-.6800	-.2300	-.1310	-.0870	-.1030
150.000	.0000		-.3660	-.2890	.0100	.2720		.1400							
157.000	.0000								-.5100						
162.000	.0000										-.5040	-.1930	-.1160	-.0650	-.0790
165.000	.0000								-.5770						
169.000	.0000						.4860								
172.000	.0000								-.1090		-.5590	-.1620	-.1180	-.0690	-.0720
180.000	.0000	.1580	-.4740	-.1740	.0150	.4300									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1300							-.0750		-.1460
40.000	.1540	.1420		.0400	-.0280	-.1090	-.0850			-.1570
70.000		-.4390	-.3620	-.2640	-.0840	-.1100	-.0670	-.0780		
90.000		-.3160	-.2300	-.1810	-.1410	-.1350	-.0960	-.1090		
105.000				-.1440	-.1470	-.1570	-.1270	-.1440		
110.000									-.2320	
120.000		-.1840	.0120	.0810	-.3200	-.2150	-.1180	-.1150	-.1750	
135.000				.2460	-.1250	-.2320	-.1340	-.1530		
150.000		-.1190	.0100	.1740	-.1060	-.2060	-.1590	-.1790		
165.000		-.0940		.0880	.0830	-.1750	-.1590	-.2020		
180.000		-.0760	.0040	.0160						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBFB36)

MACH (1) = .601 BETA (4) = 4.160

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.2830	.0620	.0650			.0750		.0440	.0490	.0720	.0850	.1120
20.000	.0000		.0390	-.2650	.0530	.0740			.0720		.0290				
40.000	.0000		.0010	-.2710	.0050	.0400			.0060		-.1310	-.1470	-.0610	.0100	.0850
55.000	.0000		-.1050	-.3550	-.0740	-.0820			-.0990		-.1600				
70.000	.0000		-.2340	-.4070	-.1430	-.0420			-.0870		-.1980	-.4780	-.2310	-.1790	-.1840
90.000	.0000	.3630	-.3770	-.4550	-.0660	-.0310			-.0950		-.2370	-.5500	-.2080	-.1560	-.1810
105.000	.0000														
110.000	.0000														
120.000	.0000		-.4560	-.4040	-.0440	.0110			-.1320		-.4170	-.3470	-.1550	-.1050	-.1170
135.000	.0000														
142.000	.0000									-.6220					
150.000	.0000		-.4330	-.3550	-.0210	.2090			-.3900		-.5990	-.2110	-.1040	-.0740	-.0750
157.000	.0000							.0170							
162.000	.0000								-.6390						
165.000	.0000										-.5080	-.1830	-.1090	-.0680	-.0700
169.000	.0000								-.6160						
172.000	.0000						.4375								
180.000	.0000	.1700	-.4630	-.2130	.0040	.4120			-.1300		-.5830	-.1890	-.1480	-.1210	-.1250

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1190							-.0790		-.1530
40.000	.1240	.1210		.0410	-.0220	-.1050	-.0950			-.1660
70.000		-.4330	-.3860	-.2980	-.1740	-.1630	-.1120	-.1090		
90.000		-.3260	-.2540	-.2840	-.2420	-.1980	-.1390	-.1310		
105.000				-.2750	-.2620	-.2010	-.1680	-.1730		
110.000									-.2480	
120.000		-.1880	-.0620	-.1780	-.4760	-.2760	-.1650	-.1470	-.2060	
135.000				.3060	-.1560	-.3070	-.1850	-.1780		
150.000		-.1060	.0240	.2350	-.0810	-.3060	-.2230	-.2080		
165.000		-.0960		.1260	.0650	-.3000	-.2520	-.2130		
180.000		-.1020	-.0140	.0200						

AMES 11-707 OA12 OPA ORBITER FUSELAGE (RBPB36)

MACH (1) = .599 BETA (5) = 6.250

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.3040	.0400	.0630			.0530		.0310	.0450	.0570	.0690	.0950
20.000	.0000		-.0420	-.3120	.0190	.0460			.0380		-.0010				
40.000	.0000		-.1370	-.3660	-.0640	-.0490			-.0080		-.2530	-.2620	-.1570	-.0590	.0390
55.000	.0000		-.2750	-.4860	-.1660	-.1600			-.1720		-.2140				
75.000	.0000		-.4320	-.5420	-.2150	-.0870			-.1330		-.2280	-.4950	-.2400	-.2010	-.1900
90.000	.0000	.2030	-.5740	-.5750	-.1170	-.0760			-.1350		-.2680	-.5420	-.1880	-.1530	-.1740
105.000	.0000														
115.000	.0000														
125.000	.0000		-.5960	-.5230	-.1040	-.0470			-.2330		-.4160	-.3220	-.1380	-.0920	-.1050
135.000	.0000														
142.000	.0000									-.8220					
150.000	.0000		-.5250	-.4190	-.0800	.1230			-.4770		-.5420	-.2000	-.1120	-.0760	-.0910
157.000	.0000							-.1260							
162.000	.0000								-.7840						
165.000	.0000										-.5220	-.1830	-.1140	-.0800	-.1070
169.000	.0000								-.,.o/0						
172.000	.0000						.3530								
180.000	.0000	.1460	-.4920	-.2560	-.0310	.3530			-.1720		-.6340	-.2350	-.2520	-.3450	-.1760

X/LB	.5873	.6626	.7380	.7869	.9283	.8848	.9262	.9639	1.0015	1.0382
PHI										
.000	.1010							-.0760		-.1560
40.000	.0840	.0990		.0360	-.0230	-.1080	-.1020			-.1670
75.000		-.4460	-.4100	-.3690	-.2300	-.2110	-.1400	-.1300		
90.000		-.3480	-.3240	-.3670	-.2920	-.2400	-.1690	-.1640		
105.000				-.3620	-.3400	-.2740	-.2050	-.2010		
115.000									-.2690	
120.000		-.2110	-.0740	-.2560	-.6650	-.3490	-.2110	-.1910	-.2270	
135.000				.3620	-.1870	-.3910	-.2540	-.2140		
150.000		-.1290	-.0090	.1490	-.1760	-.4530	-.3450	-.2920		
165.000		-.1280		.0830	-.0070	-.4800	-.3740	-.2330		
180.000		-.1620	-.0860	-.0730						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBPB36)

MACH (2) = .903 BETA (1) = -8.170

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.0000	.0000	.0000	-.4390	.0760	.1150			.0900		.0400	.0110	.0270	.0780	.1470
20.000	.0000		.3130	-.2970	.0820	.1230			.1020		.0400				
40.000	.0000		.4610	-.0550	.1740	.1610			.1420		.0460	-.0040	.0550	.1330	.2030
55.000	.0000		.4870	.0200	.2310	.2330			.1990		.0680				
70.000	.0000		.4220	-.0020	.1560	.2290			.1900		.0310	-.5530	-.2610	-.0470	-.0140
90.000	.0000	.9010	.2600	-.1070	.1890	.2370			.2050		-.0330	-.7070	-.3080	-.1070	-.1050
105.000	.0000														
110.000	.0000														
120.000	.0000		.0080	-.1940	.1380	.2850			.3440		-.3550	-.8820	-.3190	-.1720	-.1730
135.000	.0000									-.5050					
142.000	.0000														
150.000	.0000		-.1850	-.4170	.0820	.4730			.1290		-.8050	-.7570	-.3250	-.0700	-.0820
157.000	.0000							.4820							
162.000	.0000								.0010						
165.000	.0000										-.6270	-.5990	-.2840	-.0320	-.0730
169.000	.0000								-.2530						
172.000	.0000						.6590								
180.000	.0000	.2990	-.4600	-.4960	.0340	.5210			.0950		-1.0690	-.5670	-.3570	-.1550	-.1040

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1710							-.1830		-.1660
40.000	.2390	.2140		.0600	-.0620	-.2300	-.2580			-.1640
70.000		-.3840	-.6590	-.12[illegible]	[illegible]	-.1280	-.0650	-.0470		
90.000		-.3130	-.5320	.0620	.0180	.1680	-.0880	-.0520		
105.000				.1050	.0300	-.2250	-.1030	-.0760		
110.000									-.2320	
120.000		-.3670	-.1160	.4490	-.0650	-.3390	-.0760	-.0470	-.1570	
135.000				.1700	-.1350	-.2230	-.1080	-.1150		
150.000		-.2280	-.0180	.0030	-.2690	-.1120	-.0340	-.1190		
165.000		-.2080		.0460	-.0060	-.0820	-.0410	-.2580		
180.000		-.1910	-.0660	-.0040						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB36)

MACH (2) = .903 BETA (2) = -4.05U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.0000	.0000	.0000	-.4090	.1080	.1320			.1080		.0520	.0200	.0370	.0920	.1615
20.000	.0000		.2900	-.3280	.1090	.1370			.1170		.0470				
40.000	.0000		.3690	-.1570	.1500	.1715			.1440		.0310	-.0400	.0180	.1140	.1915
55.000	.0000		.3490	-.1500	.1450	.1530			.1200		.0130				
70.000	.0000		.2590	-.1870	.0650	.1620			.1220		-.0480	-.6100	-.4000	-.0885	-.0525
90.000	.0000	.7930	.0910	-.2880	.1150	.1800			.1360		-.1230	-.7650	-.3710	-.1160	-.1075
105.000	.0000														
110.000	.0000														
120.000	.0000		-.1270	-.3800	.1050	.2560			.2430		-.4150	-.9060	-.3670	-.1190	-.1180
135.000	.0000									-.6770					
142.000	.0000														
150.000	.0000		-.2650	-.5510	.0990	.4670			.1010		-.8250	-.6440	-.3090	-.0310	-.0560
157.000	.0000							.4540							
162.000	.0000								-.0400						
165.000	.0000										-.8340	-.4970	-.2530	.0220	-.0460
169.000	.0000								-.2240						
172.000	.0000						.6670								
180.000	.0000	.3070	-.4750	-.5510	.0840	.5610			.1180		-1.0560	-.4950	-.2380	-.0640	-.0550

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1830							-.2460	-.1680	
40.000	.2330	.2220		.0800	-.0350	-.2170	-.2600		-.1700	
70.000		-.4030	-.7000	-.2100	-.0580	-.2960	-.1510	-.0920		
90.000		-.3250	-.5470	-.0440	-.1020	-.2970	-.1640	-.0870		
105.000				-.0200	-.0940	-.3280	-.1600	-.1110		
110.000									-.2560	
120.000		-.3120	-.1050	.3230	-.2010	-.4230	-.1370	-.0790	-.1860	
135.000				.2700	-.1110	-.5190	-.1220	-.1200		
150.000		-.2020	-.0160	.0390	-.1770	-.2750	-.1220	-.1580		
165.000		-.1890		.0820	-.0050	-.2310	-.1600	-.2360		
180.000		-.1600	-.0520	.0120						

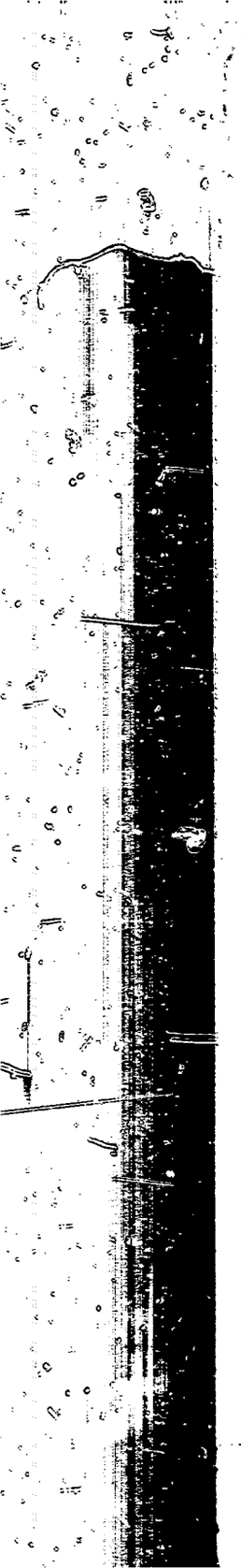
AMES 11-7D7 OA12 OBA ORBITER FUSELAGE (RBPB36)

MACH (2) = .899 BETA (3) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.3950	.1100	.1400			.1070		.0540	.0230	.0410	.0990	.1640
20.000	.0000		.2300	-.3590	.1100	.1390			.1150		.0400				
40.000	.0000		.2540	-.2900	.1060	.1500			.1150		-.0260	-.0810	-.0480	.0820	.1670
55.000	.0000		.1960	-.3470	.0580	.0770			.0460		-.0670				
70.000	.0000		.0880	-.4120	-.0120	.1050			.0560		-.1270	-.0560	-.0550	-.0170	-.0850
90.000	.0000	.6700	-.0750	-.4950	.0540	.1290			.0700		-.2110	-.0820	-.0260	-.0980	-.1060
105.000	.0000														
110.000	.0000														
120.000	.0000		-.2500	-.5060	.0880	.2170			.1280		-.4980	-.9370	-.3250	-.0470	-.0650
135.000	.0000														
142.000	.0000									-.8330					
150.000	.0000		-.3220	-.5120	.1040	.4310			.0540		-.8840	-.5920	-.1780	.0030	-.0370
157.000	.0000							.3880							
162.000	.0000								-.1110						
165.000	.0000										-.8780	-.5090	-.2320	.0320	-.0140
169.000	.0000								-.2110						
172.000	.0000						.6640								
180.000	.0000	.3280	-.4680	-.5220	.1030	.5760			.1260		-.7220	-.6030	-.1270	.0080	-.0210

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1910							-.2760		-.1600
40.000	.2130	.2160		.0890	-.0200	-.2080	-.2550			-.1910
70.000		-.4460	-.6760	-.2440	-.1670	-.4530	-.3630	-.1150		
90.000		-.3240	-.4680	-.1460	-.2600	-.4200	-.5210	-.0840		
105.000				-.1220	-.2330	-.4210	-.5160	-.1060		
110.000									-.2700	
120.000		-.2440	-.0480	.1720	-.3440	-.5180	-.4200	-.0850	-.1910	
135.000				.2930	-.1050	-.5200	-.2800	-.1360		
150.000		-.1700	-.0190	.1750	-.0980	-.4180	-.2620	-.1970		
165.000		-.1460		.1150	.0360	-.3440	-.2660	-.2240		
180.000		-.1300	-.0310	.0330						



AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBPB36)

MACH (2) = .897 BETA (4) = 4.200

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.4130	.1060	.1320			.1040		.0460	.0240	.0400	.0940	.1580
20.000	.0000		.1730	-.3950	.0960	.1250			.1010		.0260				
40.000	.0000		.1360	-.4420	.0490	.1030			.0550		-.1130	-.1570	-.1270	.0300	.1300
55.000	.0000		.0470	-.5690	-.0290	-.0010			-.0250		-.1410				
70.000	.0000		-.0810	-.6270	-.0830	.0510			.0000		-.2010	-.6920	-.2990	-.1350	-.1010
90.000	.0000	.5310	-.2340	-.6210	.0380	.0810			.0090		-.2930	-.8240	-.2420	-.0930	-.0910
105.000	.0000														
110.000	.0000														
120.000	.0000		-.3720	-.5870	.0620	.1600			.0120		-.5310	-.8680	-.2080	-.0310	-.0430
135.000	.0000														
142.000	.0000									-.9950					
150.000	.0000		-.3980	-.5540	.0770	.3760			-.0130		-.6140	-.5470	-.2030	.0090	-.0230
157.000	.0000							.2810							
162.000	.0000								-.2060						
165.000	.0000										-.6060	-.5790	-.2770	-.0310	-.0100
169.000	.0000								-.2220						
172.000	.0000						.6250								
180.000	.0000	.3750	-.4730	-.5250	.0830	.5600			.1080		-1.1180	-.4710	-.2480	-.0580	-.0610

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1800							-.2080		-.1660
40.000	.1820	.1990		.0870	-.0130	-.2020	-.2550			-.2030
70.000		-.4130	-.5520	-.3210	-.2930	-.5330	-.4810	-.1750		
90.000		-.3100	-.3490	-.2750	-.3810	-.5100	-.5540	-.1650		
105.000				-.2410	-.3840	-.5030	-.5610	-.1800		
110.000									-.2910	
120.000		-.2000	-.0860	-.1440	-.4770	-.5730	-.4740	-.1610	-.2260	
135.000				.2600	-.1060	-.5770	-.4170	-.2150		
150.000		-.1470	-.0120	.2170	-.0250	-.4670	-.4000	-.2100		
165.000		-.1340		.1300	.0610	-.3980	-.3750	-.2350		
180.000		-.1560	-.0440	.0230						

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBP836)

MACH (2) = .902 BETA (5) = 8.330

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3266	.3953	.5125
PHI															
.000	.0000	.0000	.0000	-.4530	.0780	.1100			.0910		.0290	.0070	.0170	.0720	.1380
20.000	.0000		.1180	-.4540	.0580	.0990			.0780		.0010				
40.000	.0000		.0270	-.5650	-.0300	.0240			-.0260		-.2340	-.2620	-.2420	-.0560	.0780
55.000	.0000		-.0880	-.7300	-.1330	-.0740			-.0810		-.2090				
70.000	.0000		-.2190	-.6840	-.1970	.0160			-.0450		-.2610	-.7070	-.3770	-.1710	-.1210
90.000	.0000	.4080	-.3620	-.6440	-.1690	.0480			-.0390		-.3210	-.8510	-.2490	-.0990	-.0950
105.000	.0000														
110.000	.0000														
120.000	.0000		-.4670	-.6200	-.0550	.1080			-.0840		-.5010	-.7150	-.2590	-.0480	-.0460
135.000	.0000														
142.000	.0000									-.7900					
150.000	.0000		-.4590	-.6340	-.0010	.3020			-.0860		-.7350	-.5860	-.3630	-.0690	-.0230
157.000	.0000							.1560							
162.000	.0000								-.2990						
165.000	.0000										-.6020	-.5680	-.2630	.0000	-.0290
169.000	.0000								-.2430						
172.000	.0000						.5540								
180.000	.0000	.3200	-.4800	-.5460	.0280	.5120			.0800		-1.1040	-.5150	-.3590	-.1480	-.1380

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1680							-.1710		-.1650
40.000	.1370	.1630		.0850	-.0060	-.1900	-.2540			-.2210
70.000		-.3770	-.5420	-.3570	-.3140	-.5620	-.6240	-.1910		
90.000		-.3130	-.4070	-.3510	-.4210	-.5350	-.6060	-.2500		
105.000				-.3210	-.4660	-.5370	-.5990	-.3190		
110.000									-.2880	
120.000		-.2150	-.1300	-.2010	-.5800	-.6210	-.5530	-.4670	-.2120	
135.000				.3240	-.0550	-.6230	-.5160	-.4780		
150.000		-.1590	-.0340	.1350	-.1260	-.5210	-.5280	-.4110		
165.000		-.1490		.0690	.0050	-.4830	-.4870	-.2890		
180.000		-.1920	-.0730	-.0180						

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBPB37) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 15.000 RUDDER = .000
ELEVON = .000 RUDFLR = 40.000

MACH (1) = .596 BETA (1) = -8.050

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.1060	.1500	.1530			.1440		.1190	.1030	.1260	.1580	.1830
20.000	.0000		.4020	-.0030	.1630	.1800			.1720		.1390				
40.000	.0000		.5120	.1470	.2490	.2340			.2220		.1390	.1660	.1610	.2150	.2510
55.000	.0000		.5100	.1200	.2060	.1440			.1130		.0350				
70.000	.0000		.3460	.0230	.0770	.1300			.0900		-.0440	-.0830	-.2170	-.1650	-.2200
90.000	.0000	.6950	.0960	-.1320	.0880	.0990			.0620		-.1140	-.1580	-.2180	-.2170	-.1790
105.000	.0000														
110.000	.0000														
120.000	.0000		-.2390	-.2540	-.0150	.0850			.2010		-.5710	-.5610	-.3730	-.1450	-.0060
135.000	.0000														
142.000	.0000									-.3520					
150.000	.0000		-.4520	-.3780	-.0740	.2510			-.2670		-.9570	-.3140	-.1120	-.0410	-.0120
157.000	.0000							.1840							
162.000	.0000								-.4540						
165.000	.0000										-.5230	-.2680	-.1740	-.1100	-.0700
169.000	.0000								-.6900						
172.000	.0000						.4030								
180.000	.0000	-.1200	-.7130	-.2440	-.1040	.3160			-.2590		-.6810	-.2610	-.1110	-.0420	-.0200

X/LB	.1873	.6625	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1980							-.0520		-.1470
40.000	.2790	.2570		.1030	.0180	-.0760	-.0600			-.1230
70.000		-.6320	-.4730	-.3200	-.1190	-.1350	-.0950	-.0950		
90.000		-.3680	-.2340	-.1090	-.0590	-.0880	-.0880	-.1020		
105.000				.0910	-.0540	-.1100	-.1080	-.1250		
110.000									-.2310	
120.000		-.3300	-.0600	.3420	-.0770	-.1500	-.0940	-.0830	-.1670	
135.000				-.0280	-.2750	-.3260	-.2010	-.2120		
150.000		-.2000	-.0690	-.0770	-.3350	-.1570	-.0790	-.1600		
165.000		-.2110		-.0730	-.0460	-.0760	-.0740	-.2350		
180.000		-.1590	-.0850	-.0850						

AMES 11-7D7 OA12 OBA ORBITER FUSELAGE (REP837)

MACH (1) = .598 BETA (2) = -3.990

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.0720	.1720	.1790			.1640		.1350	.1370	.1530	.1720	.2010
20.000	.0000		.3820	.0010	.1810	.1900			.1770		.1380				
40.000	.0000		.4170	.0720	.2080	.2060			.1800		.0550	.0280	.1140	.1680	.2250
55.000	.0000		.3340	-.0130	.1030	.0350			.0120		-.0580				
70.000	.0000		.1730	-.1240	-.0370	.0540			.0180		-.1140	-.4490	-.2650	-.2250	-.2950
90.000	.0000	.5790	-.0730	-.2600	.0060	.0460			-.0620		-.1910	-.6210	-.3130	-.2710	-.2810
105.000	.0000														
110.000	.0000														
120.000	.0000		-.3620	-.3310	-.1400	.0660			.1210		-.5730	-.5150	-.3230	-.2820	-.2730
135.000	.0000														
142.000	.0000									-.5960					
150.000	.0000		-.5190	-.4270	-.0470	.2560			-.3130		-.8720	-.2840	-.1820	-.1590	-.1590
157.000	.0000							.1630							
162.000	.0000								-.5130						
165.000	.0000										-.5030	-.2250	-.1740	-.1130	-.1610
169.000	.0000								-.6890						
172.000	.0000						.4280								
180.000	.0000	-.1030	-.6940	-.2460	-.0620	.3600			-.2310		-.5720	-.1850	-.1560	-.1610	-.1120

X/LB	.5875	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2110							-.0520		-.1390
40.000	.2620	.2500		.1200	.0340	-.0700	-.0600			-.1310
70.000		-.6280	-.5070	-.3790	-.2680	-.2520	-.1820	-.1510		
90.000		-.4260	-.3170	-.2430	-.2030	-.2140	-.1790	-.1480		
105.000				-.0620	-.1860	-.2120	-.1880	-.1790		
110.000									-.2420	
120.000		-.2760	-.0440	.2130	-.2230	-.2230	-.1450	-.1250	-.1940	
135.000				.1350	-.2170	-.2910	-.1790	-.1840		
150.000		-.1820	-.0370	-.0120	-.2310	-.1990	-.1390	-.1890		
165.000		-.1810		-.0650	-.0680	-.1640	-.1480	-.2330		
180.000		-.1110	-.0320	-.0170						

AMES 11-7D7 OA12 O2A ORBITER FUSELAGE (RBF.37)

MACH (1) = .990 BETA (3) = .080

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.0000	.0000	.0000	-.0850	.1750	.1770			.1610		.1370	.1290	.1510	.1710	.2040
20.000	.0000		.3190	-.0370	.1790	.1760			.1620		.1260				
40.000	.0000		.2900	-.0330	.1350	.1410			.0990		-.0540	-.0680	.0100	.0980	.1870
55.000	.0000		.2240	-.1630	-.0610	-.0750			-.0800		-.1390				
70.000	.0000		-.0210	-.2790	-.1420	-.0130			-.0500		-.1780	-.3010	-.3090	-.2580	-.3260
90.000	.0000	.4520	-.2540	-.3810	-.0530	-.0140			-.0570		-.2420	-.6420	-.3170	-.2640	-.2750
105.000	.0000														
110.000	.0000														
120.000	.0000		-.4780	-.4110	-.0540	.0420			.0230		-.5540	-.4640	-.2620	-.2190	-.2460
135.000	.0000														
142.000	.0000									-.6280					
150.000	.0000		-.5520	-.4540	-.0450	.2440			-.3710		-.7770	-.2550	-.1550	-.1390	-.1740
157.000	.0000							.1080							
162.000	.0000								-.5920						
165.000	.0000										-.5120	-.2190	-.1670	-.0760	-.1030
169.000	.0000								-.7000						
172.000	.0000						.4270								
180.000	.0000	-.0710	-.6730	-.2320	-.0450	.3810			-.2460		-.5530	-.1690	-.1130	-.0840	-.0820

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2140							-.0560		-.1420
40.000	.2260	.2310		.1150	.0340	-.0740	-.0690			-.1510
70.000		-.6100	-.5130	-.4370	-.2790	-.3220	-.2240	-.1820		
90.000		-.4560	-.3660	-.3650	-.3390	-.2910	-.2300	-.1960		
105.000				-.2760	-.2750	-.2840	-.2390	-.2270		
110.000									-.2900	
120.000		-.2340	-.0420	-.0030	-.4000	-.3070	-.1960	-.1770	-.2300	
135.000				.2210	-.1810	-.2870	-.1820	-.1870		
150.000		-.2140	-.0800	.1760	-.2040	-.2880	-.2310	-.2460		
165.000		-.1270		.0510	.1020	-.2150	-.1930	-.2380		
180.000		-.1050	-.0200	-.0150						

AMES 11-7D7 OA12 OEA ORBITER FUSELAGE (RBPB37)

MACH (1) = .996 BETA (4) = 4.160

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.0870	.1750	.1720			.1600		.1350	.1310	.1480	.1680	.2010
25.000	.0000		.2470	-.0760	.1540	.1560			.1460		.1030				
40.000	.0000		.1900	-.1350	.0440	.0510			-.0680		-.2000	-.2300	-.1040	.0200	.1340
55.000	.0000		.0140	-.3080	-.1190	-.1780			-.1780		-.2200				
70.000	.0000		-.2240	-.4230	-.2290	-.0690			-.1100		-.2320	-.5360	-.3300	-.2910	-.3550
90.000	.0000	.2870	-.4480	-.4940	-.1050	-.0540			-.1030		-.2750	-.6320	-.3060	-.2500	-.2780
105.000	.0000														
110.000	.0000														
125.000	.0000		-.6030	-.5170	-.1820	.0120			-.0740		-.5250	-.4000	-.2040	-.1610	-.1740
135.000	.0000														
142.000	.0000									-.6510					
150.000	.0000		-.6190	-.4790	-.0610	.1980			-.4380		-.6740	-.2170	-.1200	-.0930	-.1160
157.000	.0000							.0680							
162.000	.0000								-.7090						
165.000	.0000										-.5240	-.1950	-.1540	-.0710	-.0900
169.000	.0000								-.7280						
172.000	.0000						.3080								
180.000	.0000	.0050	-.6740	-.2370	-.0550	.3630			-.2290		-.5710	-.1760	-.1570	-.1400	-.1090

X/LB	.5873	.6626	.7380	.7869	.8283	.8648	.9262	.9639	1.0015	1.0392
PHI										
.000	.2050							-.0540		-.1310
40.000	.1890	.2070		.1220	.0470	-.0630	-.0660			-.1430
70.000		-.6080	-.5180	-.4660	-.3340	-.3210	-.2290	-.1860		
90.000		-.4840	-.4220	-.4780	-.3990	-.3320	-.2350	-.2010		
105.000				-.4150	-.3770	-.3320	-.2640	-.2360		
110.000									-.2880	
120.000		-.2450	-.1150	-.2920	-.5630	-.3720	-.2390	-.2080	-.2390	
135.000				.2180	-.1630	-.3400	-.2300	-.2080		
150.000		-.1480	.0000	.2690	-.1210	-.3320	-.2540	-.2300		
165.000		-.1160		.1170	.0540	-.3170	-.2830	-.2400		
180.000		-.1100	-.0330	-.0110						

AMES 11-707 OA12 CEA ORBITER FUSELAGE (RDPB37)

MACH (1) = .597 BETA (5) = 8.250

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2239	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.1010	.1480	.1580			.1450		.1150	.1170	.1270	.1550	.1840
20.000	.0000		.1720	-.1150	.1020	.1170			.1150		.0630				
40.000	.0000		.0120	-.2470	-.0570	-.0730			-.1380		-.3770	-.3680	-.2490	-.0690	.0670
55.000	.0000		-.1520	-.4540	-.2230	-.2790			-.2540		-.3130				
70.000	.0000		-.3950	-.5480	-.3000	-.1270			-.1510		-.2760	-.5570	-.3650	-.3130	-.3830
90.000	.0000	.1340	-.6200	-.6180	-.1440	-.0850			-.1440		-.2980	-.6290	-.2920	-.2360	-.2960
105.000	.0000														
110.000	.0000														
120.000	.0000		-.7180	-.6170	-.1070	-.0310			-.1550		-.4930	-.3580	-.1710	-.1450	-.1910
135.000	.0000														
142.000	.0000									-.7080					
150.000	.0000		-.6890	-.5360	-.0970	.1260			-.5150		-.5960	-.2010	-.0970	-.0790	-.1070
157.000	.0000							-.1210							
162.000	.0000								-.8540						
165.000	.0000										-.5210	-.1800	-.1370	-.0830	-.1100
169.000	.0000								-.7740						
172.000	.0000						.2990								
195.000	.0000	-.0820	-.6890	-.2880	-.0930	.3030			-.2780		-.6200	-.2380	-.3110	-.2840	-.1580

Y/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1980							-.0540		-.1360
40.000	.1410	.1700		.1160	.0450	-.0610	-.0880			-.1540
70.000		-.5960	-.5300	-.4830	-.3500	-.3170	-.2320	-.1890		
90.000		-.5170	-.4890	-.5420	-.4280	-.3330	-.2570	-.2040		
105.000				-.5170	-.4390	-.3510	-.2780	-.2470		
110.000									-.3080	
120.000		-.3270	-.1620	-.3280	-.7650	-.4210	-.2920	-.2400	-.2680	
135.000				.3370	-.2100	-.4120	-.2900	-.2340		
150.000		-.1590	-.0360	.1590	-.2230	-.4490	-.3570	-.2900		
165.000		-.1590		.0680	-.0300	-.4640	-.3890	-.2510		
180.000		-.1530	-.0890	-.0770						

AMES 11-7D7 OA12 OBA ORBITER FUSELAGE (RBPB37)

MACH (2) = .899 BETA (1) = -2.150

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0189	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.1450	.1810	.2020			.1770		.1360	.1090	.1220	.1570	.2270
20.000	.0000		.4980	-.0190	.2110	.2220			.2020		.1490				
40.000	.0000		.5980	.1420	.2810	.2810			.2610		.1680	.1060	.1520	.2140	.2930
55.000	.0000		.5830	.1270	.2490	.2230			.2010		.1160				
70.000	.0000		.4460	.0280	.1110	.2210			.1960		.0520	-.5250	-.3420	-.1210	-.1030
90.000	.0000	.8480	.2150	-.1540	.1370	.2080			.2010		-.0390	-.7090	-.4860	-.2480	-.1620
105.000	.0000														
110.000	.0000														
120.000	.0000		-.1260	-.3330	.0470	.2290			.3820		-.4140	-.9140	-.5010	-.2740	-.2470
135.000	.0000														
142.000	.0000									-.5090					
150.000	.0000		-.3480	-.6290	.0010	.4330			.0720		-.9140	-.5950	-.4480	-.1190	-.1270
157.000	.0000							.4430							
162.000	.0000								-.0510						
165.000	.0000										-.6380	-.4530	-.3420	-.0830	-.1340
169.000	.0000								-.3180						
172.000	.0000						.6180								
180.000	.0000	.1380	-.6350	-.6820	-.0090	.4810			.0190		-1.0530	-.6240	-.3910	-.0780	-.0920

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2510							-.1680		-.1600
40.000	.3340	.3250		.1550	.0370	-.1530	-.1870			-.1590
70.000		-.6110	-.6810	-.5320	-.2740	-.5290	-.4180	-.2410		
90.000		-.3820	-.5770	-.0410	-.2280	-.3840	-.4840	-.1270		
105.000				.1640	-.1640	-.3610	-.5110	-.1290		
110.000									-.3120	
120.000		-.4500	-.0870	.4800	-.0060	-.4160	-.4890	-.0470	-.1900	
135.000				.0630	-.2370	-.7870	-.2220	-.1450		
150.000		-.2840	-.0560	-.0300	-.3470	-.3410	-.1290	-.1490		
165.000		-.2620		.0000	-.0640	-.2630	-.1460	-.2740		
180.000		-.2160	-.1000	-.0540						

DATE 17 SEP 75 TABULATED PRESSURE DATA - OA12A

AMES 11-7X7 OA12 OEA ORBITER FUSELAGE (REPB37)

MACH (2) = .897 BETA (2) = -4.030

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0073	.0188	.0339	.0602	.1355	.1906	.1581	.1732	.1958	.2259	.2711	.3206	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.1190	.2080	.2200			.2000		.1550	.1210	.1370	.1740	.2450
20.000	.0000		.4740	-.0370	.2270	.2320			.2160		.1540				
40.000	.0000		.5010	.0450	.2400	.2570			.2330		.1070	.0410	.0920	.1690	.2710
55.000	.0000		.4580	-.0340	.1540	.1250			.1130		.0320				
70.000	.0000		.2840	-.1420	.0020	.1530			.1290		-.0220	-.3920	-.4320	-.1670	-.1790
90.000	.0000	.7370	.0520	-.3380	.0670	.1580			.1420		-.1190	-.7660	-.5860	-.2190	-.1650
105.000	.0000														
110.000	.0000														
120.000	.0000		-.2840	-.5130	.0460	.2190			.2910		-.4750	-.9510	-.3980	-.1910	-.1610
135.000	.0000									-.6540					
142.000	.0000								.0530		-.9180	-.5580	-.4050	-.1140	-.0970
150.000	.0000		-.4260	-.6170	.0530	.4360		.4280							
157.000	.0000								-.1870						
162.000	.0000										-.8160	-.3860	-.3710	-.1620	-.1440
165.000	.0000								-.2910						
169.000	.0000						.8290								
172.000	.0000								.0450		-.9910	-.5150	-.2480	-.0480	.1550
180.000	.0000	.1440	-.6470	-.6250	.0800	.5130									

X/LB	.5875	.8826	.7500	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI								-.1810		-.1630
.000	.2680									-.1840
40.000	.3170	.3230		.1780	.0610	-.1310	-.1810			
70.000		-.6180	-.5480	-.4290	-.5480	-.5840	-.6880	-.2260		
90.000		-.4000	-.5480	-.2270	-.4780	-.4860	-.6230	-.1780		
105.000				-.0110	-.3420	-.5080	-.5890	-.2180		
110.000									-.3180	
120.000		-.3430	-.0590	.3550	-.2230	-.5740	-.5420	-.1940	-.1970	
135.000				.1890	-.2080	-.7410	-.4340	-.1800		
150.000		-.2220	-.0390	-.0180	-.2360	-.5350	-.2800	-.2680		
165.000		-.2180		.0290	-.0850	-.4390	-.2980	-.2800		
180.000		-.1980	-.0850	-.0480						

AMES 11-7X7 OA12 CRA ORBITER FUSELAGE (RDFB37)

MACH (2) = .900 BETA (9) = .070

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1946	.1581	.1732	.1958	.2259	.2711	.3259	.3953	.5125
PHI															
.000	.0000	.0000	.0000	-.1250	.2570	.2150			.1990		.1480	.1240	.1120	.1070	.2420
20.000	.0000		.4050	-.0290	.2570	.2170			.2550		.1380				
40.000	.0000		.3800	-.0810	.1690	.2030			.1670		.0870	-.0490	-.0030	.1110	.2290
55.000	.0000		.2810	-.2250	.0370	.0240			.0280		-.0530				
70.000	.0000		.1150	-.3510	-.0870	.0900			.0660		-.0980	-.0490	-.0270	-.1980	-.2290
90.000	.0000	.0240	-.1080	-.5470	.0220	.1150			.1080		-.1990	-.0810	-.0490	-.1090	-.1680
105.000	.0000														
110.000	.0000														
120.000	.0000		-.3080	-.5960	.0560	.1900			.1950		-.5460	-.0160	-.3990	-.1930	-.1040
135.000	.0000														
142.000	.0000									-.7840					
150.000	.0000		-.4780	-.5920	.0850	.3990			.0140		-.9350	-.4880	-.3240	-.0410	-.1220
157.000	.0000							.3550							
162.000	.0000								-.1470						
165.000	.0000										-.8530	-.4910	-.3470	.0270	-.0360
180.000	.0000								-.2540						
172.000	.0000						.5710								
180.000	.0000	.1020	-.6480	-.5990	.0870	.5070			.0620		-.7560	-.5810	-.1490	.0620	-.0230

X/LB	.5073	.6026	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2750							-.2030		-.1750
40.000	.2800	.3080		.1810	.0730	-.1210	-.1790			-.2130
75.000		-.5840	-.8100	-.4250	-.4160	-.5840	-.7250	-.1770		
90.000		-.4330	-.5880	-.3900	-.5320	-.5830	-.6260	-.1990		
105.000				-.2280	-.4120	-.5670	-.5910	-.3990		
110.000									-.3060	
120.000		-.2630	-.0870	.1220	-.3430	-.6340	-.5590	-.4270	-.1750	
135.000				.2400	-.1500	-.6180	-.4750	-.2720		
150.000		-.2210	-.0810	.1430	-.1380	-.5430	-.4540	-.2940		
165.000		-.1980		.0800	.0210	-.4560	-.4090	-.2640		
180.000		-.1580	-.0810	-.0150						

AMES 11-7ft OA12 OEA ORBITER FUSELAGE (RBFB37)

MACH (2) = .902 BETA (4) = 4.250

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3993	.5125
PHI															
.000	.0000	.0000	.0000	-.1380	.1980	.2110			.1980		.1400	.1150	.1250	.1670	.2370
20.000	.0000		.3480	-.1420	.1780	.1990			.1810		.1170				
40.000	.0000		.2570	-.2100	.0750	.1190			.1680		-.1280	-.1650	-.1180	.0220	.1830
55.000	.0000		.1420	-.4260	-.0630	-.0770			-.0580		-.1390				
70.000	.0000		-.0530	-.5890	-.1730	.0370			.0870		-.1840	-.0870	-.0150	-.2570	-.2570
90.000	.0000	.4920	-.2640	-.6530	-.0140	.0790			.0320		-.2900	-.0430	-.0150	-.1590	-.1580
105.000	.0000														
110.000	.0000														
125.000	.0000		-.4750	-.6170	-.1060	.1700			.0840		-.5740	-.0440	-.3000	-.1080	-.1080
135.000	.0000														
142.000	.0000									-.0870					
150.000	.0000		-.5440	-.6040	.0390	.3490			-.0370		-.6180	-.5540	-.2950	-.1040	-.1420
157.000	.0000							.2610							
162.000	.0000								-.2330						
165.000	.0000										-.6130	-.5910	-.3240	.0370	-.1230
169.000	.0000								-.2080						
172.000	.0000						.5850								
180.000	.0000	.1670	-.6540	-.6260	.0580	.5170			.0420		-1.0620	-.5130	-.2900	-.0490	-.0520

X/LB	.5873	.6626	.7380	.7869	.8283	.8648	.9282	.9639	1.0015	1.0398
PHI										
.000	.2640							-.1980		-.1730
40.000	.2430	.2760		.1810	.0780	-.1110	-.1810			-.2170
70.000		-.5410	-.7150	-.4620	-.4020	-.6390	-.7370	-.2530		
90.000		-.4390	-.5530	-.5190	-.5770	-.6110	-.6570	-.4340		
105.000				-.3870	-.5060	-.5740	-.6560	-.5570		
110.000									-.2930	
120.000		-.2610	-.1740	-.2530	-.5080	-.6080	-.6040	-.5900	-.2160	
135.000				.2090	-.1320	-.6180	-.5630	-.4430		
150.000		-.2010	-.0780	.2170	-.0360	-.5090	-.5140	-.3620		
165.000		-.1690		.1110	.0540	-.4180	-.4920	-.2910		
180.000		-.1980	-.0910	-.0380						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB37)

MACH (2) = .902 BETA (5) = 0.330

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.1480	.1810	.1970			.1770		.1280	.1060	.1250	.1480	.2210
20.000	.0000		.2870	-.1750	.1330	.1630			.1520		.0910				
40.000	.0000		.1490	-.3220	-.0190	.0160			-.1490		-.2830	-.2990	-.2290	-.0830	.1250
55.000	.0000		.0050	-.3930	-.2190	-.1670			-.1310		-.2210				
70.000	.0000		-.2010	-.6830	-.3480	-.0100			-.1480		-.2210	-.7030	-.6630	-.3000	-.2990
90.000	.0000	.3710	-.3930	-.6910	-.1750	.0540			-.0120		-.2990	-.8540	-.3890	-.1490	-.1830
105.000	.0000														
110.000	.0000														
125.000	.0000		-.5760	-.5920	-.1590	.1250			-.0160		-.5090	-.8560	-.2900	-.0630	-.1990
135.000	.0000														
142.000	.0000									-.8370					
150.000	.0000		-.6190	-.6590	-.0240	.3130			-.0970		-.7080	-.5920	-.3510	-.0120	-.0410
157.000	.0000							.1740							
162.000	.0000								-.3230						
135.000	.0000										-.5650	-.6010	-.3320	.0440	-.0350
169.000	.0000								-.2970						
172.000	.0000						.5220								
180.000	.0000	.1670	-.6800	-.6730	-.0100	.4730			.0070		-1.1090	-.5430	-.4180	-.0830	-.0920

X/LB	.5873	.8826	.7580	.7880	.8203	.8848	.9282	.9639	1.0015	1.0392
PHI										
.000	.2470							-.1680		-.1620
40.000	.1880	.2340		.1670	.0720	-.1110	-.1790			-.2140
70.000		-.3070	-.6980	-.4330	-.4180	-.6430	-.7830	-.4190		
90.000		-.4490	-.5790	-.4760	-.6390	-.6130	-.7450	-.6350		
105.000				-.4180	-.5820	-.6070	-.7270	-.5840		
110.000									-.2610	
120.000		-.2890	-.2080	-.2640	-.5930	-.6440	-.6510	-.6300	-.1890	
135.000				.3560	-.0570	-.6630	-.5780	-.5570		
150.000		-.2020	-.0700	.1380	-.1330	-.5450	-.5270	-.4960		
165.000		-.1920		.0770	-.0660	-.4890	-.4920	-.3120		
180.000		-.2140	-.0800	-.0410						

DATE 17 SEP 75 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBP830) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.9300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 20.000 RUDDER = .000
ELEVON = .000 RUDFLR = 40.000

MACH (1) = .999 BETA (1) = -0.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3993	.5188
PHI															
.000	.0000	.0000	.0000	.1060	.2650	.2580			.2410		.2160	.2060	.2220	.2520	.2800
20.000	.0000		.6120	.2160	.2970	.2900			.2780		.2410				
40.000	.0000		.6510	.3080	.3480	.3280			.3000		.1830	.1320	.2160	.2980	.3440
55.000	.0000		.5460	.1840	.1880	.0640			.1460		-.0110				
75.000	.0000		.3320	-.0040	-.0360	.0050			.0500		-.0680	-.4320	-.3180	-.2810	-.3230
90.000	.0000	.5910	.0060	-.2260	-.0160	.0160			.0010		-.2130	-.7190	-.4580	-.3950	-.3530
105.000	.0000														
110.000	.0000														
125.000	.0000		-.4390	-.4160	-.1530	-.0210			.1950		-.7570	-.6970	-.5130	-.4980	-.4620
135.000	.0000									-.6360					
142.000	.0000								-.3580		-1.1130	-.3610	-.2710	-.2550	-.2780
150.000	.0000		- 6830	-.5600	-.1690	.1860		.1080							
157.000	.0000								-.5570						
162.000	.0000										-.5850	-.2940	-.2200	-.2120	-.2140
165.000	.0000								-.6110						
169.000	.0000						.3400								
172.000	.0000										-.6310	-.2520	-.2140	-.1980	-.1980
180.000	.0000	-.2990	-.9160	-.3420	-.1480	.2690			-.3590						

X/LB	.5873	.6828	.7580	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
.000	.2950							-.0100		-.1280
40.000	.5840	.3080		.2090	.1130	.0020	-.0130			-.1230
70.000		-.9530	-.7620	-.5800	-.3510	-.2850	-.2080	-.1770		
90.000		-.8630	-.9910	-.5130	-.3670	-.2950	-.2130	-.1930		
105.000				-.1040	-.2720	-.2650	-.2140	-.2130		
110.000									-.3070	
120.000		-.3940	-.1000	.2530	-.1810	-.2310	-.1330	-.1030	-.1740	
135.000				-.0280	-.3310	-.3810	-.2370	-.2360		
150.000		-.2480	-.1060	-.0850	-.3700	-.2120	-.1240	-.1980		
165.000		-.2680		-.0820	-.0930	-.1630	-.1280	-.2700		
180.000		-.2100	-.1480	-.1470						

AMES 11-FOT OA12 OEA ORBITER FUSELAGE (RBPB38)

MACH (1) = .990 BETA (2) = -3.960

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3238	.3993	.5125
PHI															
.000	.0000	.0000	.0000	.1320	.2990	.2770			.2620		.2340	.2270	.2450	.2670	.2990
20.000	.0000		.5090	.2980	.3080	.2920			.2800		.2470				
40.000	.0000		.5510	.2190	.2800	.2590			.2160		.0500	-.0010	.1140	.2250	.3080
55.000	.0000		.3900	.0310	.0610	-.0780			-.1670		-.1130				
75.000	.0000		.1500	-.1720	-.1620	.0010			-.0330		-.1650	-.5120	-.3770	-.3230	-.0440
90.000	.0000	.4750	-.1790	-.3540	-.1040	-.0380			-.0560		-.2990	-.7590	-.4760	-.4010	-.3670
105.000	.0000														
110.000	.0000														
120.000	.0000		-.5590	-.4760	-.1410	-.0130			.1210		-.7440	-.6340	-.4580	-.3930	-.3640
135.000	.0000														
142.000	.0000									-.6640					
150.000	.0000		-.7130	-.5840	-.1290	.2140			-.3940		-.9080	-.3210	-.2530	-.2270	-.2550
157.000	.0000							.1050							
162.000	.0000								-.6010						
165.000	.0000										-.5230	-.2520	-.1990	-.1430	-.2250
169.000	.0000								-.8040						
172.000	.0000						.3740								
180.000	.0000	-.3030	-.8950	-.3230	-.1080	.3180			-.3210		-.5550	-.1820	-.1560	-.1450	-.1900

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3140							-.0130		-.1280
40.000	.3520	.3580		.2190	.1220	.0040	-.0140			-.1290
75.000		-.9390	-.7400	-.5850	-.3660	-.3050	-.2100	-.1840		
90.000		-.7500	-.6790	-.6410	-.4930	-.3390	-.2390	-.2090		
105.000				-.3070	-.3800	-.3250	-.2670	-.2370		
110.000									-.3240	
120.000		-.3340	-.0860	.0790	-.3600	-.3150	-.1950	-.1630	-.2350	
135.000				.1420	-.2580	-.3270	-.2025	-.2120		
150.000		-.2430	-.0780	.0280	-.2540	-.2410	-.1660	-.2180		
165.000		-.2500		-.0550	-.0380	-.2420	-.1990	-.2740		
180.000		-.1410	-.0640	-.0520						

AMES 11-7D7 OA12 OPA ORBITER FUSELAGE (RDP830)

MACH (1) = .597 BETA (3) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3236	.3993	.5125
PHI															
.000	.0000	.0000	.0000	.1340	.3030	.2820			.2680		.2400	.2380	.2550	.2730	.3040
25.000	.0000		.5260	.1640	.2930	.2690			.2620		.2240				
40.000	.0000		.4270	.1020	.1900	.1620			.1030		-.1070	-.1530	-.0480	.1340	.2530
55.000	.0000		.2550	-.1170	-.0650	-.2020			-.1750		-.2120				
70.000	.0000		-.0260	-.3120	-.2540	-.0690			-.0940		-.2210	-.5720	-.4130	-.3710	-.6450
90.000	.0000	.3670	-.3360	-.4630	-.1320	-.0700			-.0990		-.2940	-.7580	-.4520	-.3920	-.3700
105.000	.0000														
110.000	.0000														
120.000	.0000		-.6470	-.5390	-.1340	-.0100			.0490		-.6930	-.5500	-.3560	-.2980	-.2570
135.000	.0000														
142.000	.0000									-.6780					
150.000	.0000		-.7480	-.5180	-.0980	.2150			-.4390		-.8550	-.2740	-.2040	-.2360	-.3190
157.000	.0000							.0750							
162.000	.0000								-.6630						
165.000	.0000										-.5060	-.2220	-.1630	-.0780	-.1260
169.000	.0000								-.7970						
172.000	.0000						.3710								
180.000	.0000	-.2380	-.8670	-.3120	-.0870	.3380			-.3020		-.5270	-.1560	-.1040	-.0760	-.0950

X/LB	.5875	.6626	.7380	.7869	.8282	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3190							-.0090		-.1210
40.000	.3110	.3340		.2190	.1280	.0060	-.0140			-.1550
70.000		-.6860	-.7260	-.5960	-.3970	-.3190	-.2060	-.1820		
90.000		-.7860	-.7160	-.7670	-.5590	-.3740	-.2530	-.2230		
105.000				-.5380	-.4720	-.3630	-.2900	-.2710		
110.000									-.3780	
120.000		-.2990	-.1380	-.1940	-.5790	-.3880	-.2530	-.2290	-.2690	
135.000				.2280	-.2250	-.3160	-.1950	-.2080		
150.000		-.2930	-.1240	.1800	-.2720	-.3640	-.3030	-.3130		
165.000		-.1780		.0270	.0710	-.2430	-.2210	-.2770		
180.000		-.1320	-.0500	-.0530						

AMES 11-7X7 OA12 OPA ORBITER FUSELAGE (RBPB38)

MACH (1) = .597 BETA (4) = 4.190

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1546	.1581	.1732	.1958	.2259	.2711	.3246	.3953	.5125
PHI															
.000	.0000	.0000	.0000	.1190	.2900	.2730			.2550		.2320	.2280	.2510	.2680	.3010
25.000	.0000		.4510	.1210	.2680	.2410			.2320		.1970				
40.000	.0000		.2890	-.0180	.0790	.0290			-.1620		-.3180	-.3560	-.1740	-.0230	.1910
55.000	.0000		.0640	-.2860	-.2190	-.3480			-.3050		-.3210				
70.000	.0000		-.2330	-.4760	-.3640	-.1380			-.1640		-.2850	-.6230	-.4490	-.4240	-.6940
90.000	.0000	.2150	-.5280	-.5860	-.1910	-.1140			-.1550		-.3380	-.7570	-.4460	-.3770	-.3960
105.000	.0000														
110.000	.0000														
120.000	.0000		-.7780	-.6520	-.1410	-.0240			-.0410		-.6570	-.4810	-.2660	-.2270	-.2340
135.000	.0000														
142.000	.0000									-.7040					
150.000	.0000		-.8100	-.4400	-.1030	.1870			-.4930		-.7400	-.2420	-.1510	-.1480	-.2170
157.000	.0000							-.1685							
162.000	.0000								-.7680						
165.000	.0000										-.5160	-.2130	-.1400	-.0690	-.1590
169.000	.0000								-.0340						
172.000	.0000						.3330								
180.000	.0000	-.2560	-.8040	-.3310	-.1060	.3180			-.3290		-.5520	-.1750	-.1750	-.1410	-.1980

X/LB	.5073	.6626	.7736	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3190							-.0115		-.1280
40.000	.2560	.2920		.2110	.1330	.1460	-.1070			-.1470
75.000		-.9410	-.8890	-.6370	-.4310	-.3400	-.2230	-.1820		
90.000		-.8240	-.7850	-.6310	-.6280	-.4220	-.2580	-.2110		
105.000				-.7180	-.5780	-.4110	-.3080	-.2730		
110.000									-.3580	
120.000		-.3480	-.2560	-.6010	-.6220	-.4880	-.3190	-.2690	-.2950	
135.000				.0710	-.1680	-.3830	-.2510	-.2410		
150.000		-.2200	-.0400	.3590	-.0990	-.3580	-.2740	-.2660		
165.000		-.1500		.1110	.0680	-.3380	-.3060	-.2910		
180.000		-.1340	-.0580	-.0490						

AMES 11-7X7 OA12 OPA ORBITER FUSELAGE (RBPB38)

MACH (1) = .900 BETA (5) = 0.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1335	.1506	.1581	.1732	.1958	.2259	.2711	.3208	.3643	.5125
PHI															
.000	.0000	.0000	.0000	.1050	.2660	.2560			.2400		.2130	.2130	.2280	.2500	.2780
20.000	.0000		.3750	.0710	.2190	.2040			.1950		.1480				
40.000	.0000		.1470	-.1410	-.0510	-.1240			-.2260		-.5380	-.5670	-.3400	-.0910	.1075
55.000	.0000		-.0890	-.4430	-.3470	-.4670			-.3970		-.4560				
75.000	.0000		-.4230	-.6100	-.4490	-.2000			-.2090		-.3340	-.6450	-.4890	-.4760	-.6990
90.000	.0000	.0370	-.7090	-.6930	-.2180	-.1420			-.1870		-.3570	-.7380	-.4190	-.3500	-.4270
105.000	.0000														
115.000	.0000														
120.000	.0000		-.8840	-.7530	-.1420	-.0380			-.1130		-.6050	-.4290	-.2370	-.2190	-.2590
135.000	.0000														
142.000	.0000									-.7160					
150.000	.0000		-.8560	-.4090	-.1190	.1340			-.5490		-.6520	-.2230	-.1090	-.1050	-.1380
157.000	.0000							-.0990							
162.000	.0000								-.8930						
165.000	.0000										-.5300	-.1990	-.1320	-.0820	-.1260
169.000	.0000								-.8810						
172.000	.0000						.2630								
180.000	.0000	-.2700	-.8990	-.3650	-.1490	.2620			-.3780		-.6050	-.2180	-.4060	-.1890	-.1490
X/LP	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	.2940							-.0160		-.1240					
40.000	.1910	.2480		.2020	.1280	.0120	-.0140			-.1260					
70.000		-.8140	-.6940	-.6370	-.4830	-.3620	-.2310	-.1770							
90.000		-.8460	-.7650	-.9010	-.6840	-.4240	-.2900	-.2150							
105.000				-.9060	-.6310	-.4360	-.3310	-.2830							
115.000									-.3700						
120.000		-.4540	-.3540	-.5990	-1.0470	-.5800	-.3840	-.3240	-.3440						
135.000				.3500	-.2120	-.4540	-.3140	-.2770							
150.000		-.2090	-.0730	.1200	-.2510	-.4580	-.3720	-.3240							
165.000		-.2120		.0400	-.0440	-.4470	-.3970	-.3050							
180.000		-.2070	-.1400	-.1430											

AMES 11-7U7 OA12 OBA ORBITER FUSELAGE (RBPB38)

MACH (2) = .901 BETA (1) = -8.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0189	.0339	.0502	.1355	.1906	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.1170	.3210	.3130			.2920		.2550	.2360	.2470	.2740	.3270
25.000	.0000		.6980	.2380	.3430	.3420			.3300		.2770				
40.000	.0000		.7400	.3340	.3950	.3890			.3690		.2500	.1980	.2430	.3060	.3950
55.000	.0000		.6430	.2350	.2540	.1620			.1680		.1200				
70.000	.0000		.4680	.0550	.0240	.1830			.1830		.0650	-.4570	-.3480	-.3010	-.3910
90.000	.0000	.7680	.1610	-.2120	.0470	.1390			.1720		-.0370	-.6930	-.5850	-.4200	-.2070
105.000	.0000														
110.000	.0000														
125.000	.0000		-.2790	-.5030	-.0830	.1380			.4070		-.6160	-1.1020	-.7560	-.3000	-.2790
135.000	.0000														
142.000	.0000									-.5170					
150.000	.0000		-.5230	-.6940	-.1010	.3850			.1070		-1.0750	-.7240	-.4820	-.2140	-.1720
157.000	.0000							.3940							
162.000	.0000								-.0990						
165.000	.0000										-.6470	-.5100	-.4150	-.1340	-.2060
169.000	.0000								-.3780						
172.000	.0000						.5580								
180.000	.0000	-.0340	-.7920	-.6320	-.1010	.4260			-.0550		-1.0210	-.6940	-.3190	-.1600	-.0930

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3550							-.1010		-.1630
40.000	.4450	.4430		.2715	.1520	-.0280	-.0800			-.2350
70.000		-.8340	-1.0370	-.6710	-.8370	-.8080	-.5200	-.4670		
90.000		-.5860	-.8850	-.5000	-.7920	-.5480	-.5640	-.3970		
105.000				-.0230	-.5550	-.5080	-.5410	-.3950		
110.000									-.4120	
125.000		-.4620	-.1850	.4090	-.2240	-.5350	-.4260	-.1770	-.2690	
135.000				.0030	-.3400	-.9180	-.4450	-.2050		
150.000		-.2940	-.1050	-.0760	-.3640	-.6350	-.2740	-.1800		
165.000		-.2880		-.0330	-.1140	-.5350	-.2970	-.3140		
180.000		-.3070	-.1720	-.0900						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 CEA ORBITER FUSELAGE (RBPB38)

MACH (2) = .899 BETA (2) = -3.990

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.1420	.3420	.3360			.3130		.2690	.2500	.2570	.2900	.3460
25.000	.0000		.6680	.7230	.3440	.3460			.3330		.2750				
40.000	.0000		.6400	.2420	.3250	.3320			.2960		.1470	.0990	.1610	.2460	.3560
55.000	.0000		.5180	.0700	.1210	.0290			.0550		.0250				
70.000	.0000		.2980	-.1230	-.1100	.1090			.1130		-.1070	-.5540	-.4280	-.1870	-.5570
90.000	.0000	.6560	-.0040	-.4050	-.0270	.0950			.1220		-.1100	-.7680	-.6630	-.2360	-.2490
105.000	.0000														
115.000	.0000														
120.000	.0000		-.4070	-.6310	-.0760	.1530			.3270		-.6670	-.9650	-.4450	-.1820	-.1560
135.000	.0000									-.6270					
142.000	.0000														
150.000	.0000		-.5950	-.6470	-.0440	.4000			.4030		1.0330	-.6150	-.4720	-.2800	-.1600
157.000	.0000							.4010							
162.000	.0000								-.1260						
165.000	.0000										-.7620	-.4160	-.3830	-.0220	-.1620
169.000	.0000								-.3530						
172.000	.0000						.5640								
180.000	.0000	-.0250	-.6590	-.5410	-.0960	.4360			-.0160		-.8220	-.5580	-.2140	-.0080	-.0620

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3700							-.1030		-.1740
40.000	.4180	.4310		.2860	.1720	-.0110	-.0750			-.2500
75.000		-.8000	-1.0000	-.5990	-.6060	-.6130	-.5120	- 4690		
90.000		-.6580	-.9130	-.6770	-.8540	-.5830	-.5690	-.4160		
105.000				-.2340	-.5560	-.6740	-.4640	-.4010		
115.000									-.4120	
120.000		-.3470	-.1080	.3060	-.2900	-.7090	-.4210	-.2160	-.3020	
135.000				.2140	-.2480	-.7840	-.4670	-.1820		
150.000		-.2700	-.1000	.0070	-.2330	-.6340	-.3300	-.2060		
165.000		-.3020		.0110	-.0940	-.5660	-.3690	-.2970		
180.000		-.2640	-.1510	-.0730						

AMES 11-7X7 OA12 02A ORBITER FUSELAGE (RBPB30)

MACH (2) = .951 BETA (3) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.1380	.3410	.3350			.3210		.2740	.2560	.2600	.2960	.3490
20.000	.0000		.6110	.1780	.3350	.3260			.3160		.2570				
40.000	.0000		.5270	.1240	.2370	.2440			.1950		.0000	-.0290	.0470	.1660	.3040
55.000	.0000		.3810	-.0890	-.0110	-.0930			-.0420		-.0690				
70.000	.0000		.1400	-.2970	-.2690	.0420			.0540		-.0740	-.6230	-.5310	-.2550	-.6580
90.000	.0000	.5500	-.1520	-.5890	-.4700	.0630			.0980		-.1730	-.8180	-.7440	-.2230	-.2740
105.000	.0000														
110.000	.0000														
122.000	.0000		-.4980	-.6790	-.1470	.1570			.2470		-.6570	-.9220	-.4440	-.1580	-.1250
135.000	.0000														
142.000	.0000									-.7430					
150.000	.0000		-.6430	-.5580	-.1670	.3530			-.0230		-1.0180	-.6160	-.3880	-.1250	-.2150
157.000	.0000							.3200							
162.000	.0000								-.1570						
165.000	.0000										-.8080	-.4680	-.3260	.0340	-.0680
169.000	.0000								-.2840						
172.000	.0000						.4250								
180.000	.0000	.0010	-.6000	-.4880	-.1090	.3750			-.0070		-.7640	-.5360	-.1360	.0150	-.0370

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3850							-.1030		-.1750
40.000	.3780	.4110		.2910	.1840	.0420	-.0740			-.2690
75.000		-.7540	-.9320	-.5900	-.5610	-.5190	-.4850	-.4820		
90.000		-.8630	-.9170	-.8140	-.9450	-.5870	-.5140	-.4190		
105.000				-.3920	-.6170	-.7380	-.4330	-.4180		
110.000									-.4240	
125.000		-.2850	-.2070	.0260	-.3880	-.7990	-.4280	-.2730	-.3530	
139.000				.2420	-.1970	-.6620	-.5650	-.1790		
150.000		-.2790	-.1230	.1490	-.1610	-.6260	-.5810	-.2730		
165.000		-.2740		.0340	.0200	-.5430	-.5080	-.2810		
180.000		-.2260	-.1100	-.0580						

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBPB38)

MACH (2) = .900 BETA (4) = 4.220

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5129
PHI															
.000	.0000	.0000	.0000	.1140	.3290	.3220			.3040		.2630	.2410	.2520	.2820	.3400
20.000	.0000		.5440	.1230	.2980	.3000			.2860		.2310				
40.000	.0000		.4020	.0110	.1260	.1210			.0520		-.1880	-.1920	-.0830	.0580	.2410
55.000	.0000		.2060	-.2610	-.1820	-.2230			-.1440		-.1700				
70.000	.0000		-.0270	-.4780	-.3090	-.0150			-.0110		-.1390	-.6720	-.6220	-.3010	-.6680
90.000	.0000	.4270	-.2940	-.6840	-.1330	.0340			.0240		-.2380	-.8550	-.7500	-.1940	-.2090
105.000	.0000														
110.000	.0000														
120.000	.0000		-.6000	-.6440	-.1060	.1530			.1280		-.6500	-.9710	-.4530	-.1660	-.1430
135.000	.0000														
142.000	.0000									-.7670					
150.000	.0000		-.7000	-.5260	-.1160	.2870			-.0830		-.9420	-.5750	-.2260	-.0130	-.0970
157.000	.0000							.2020							
162.000	.0000								-.2760						
165.000	.0000										-.7860	-.5410	-.2880	.0270	-.0340
169.000	.0000								-.3080						
172.000	.0000						.4460								
180.000	.0000	.0100	-.6680	-.5590	-.0870	.4290			-.0310		-.7750	-.5630	-.2360	-.0180	-.0540

X/LB	.3073	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3670							-.1060		-.1780
40.000	.3190	.3630		.2780	.1820	-.0030	-.0760			-.2500
75.000		-.7030	-.8760	-.6430	-.6010	-.4020	-.4830	-.4710		
90.000		-.6920	-.8740	-.9010	-1.0250	-.3460	-.4020	-.4270		
105.000				-.5820	-.7360	-.6490	-.3970	-.4540		
110.000									-.4080	
120.000		-.3320	-.2410	-.3250	-.5480	-.8520	-.3430	-.3320	-.3950	
135.000				.1110	-.1890	-.6340	-.5330	-.2480		
150.000		-.3000	-.1780	.2750	-.1070	-.5620	-.5560	-.2750		
165.000		-.2200		.1100	.0870	-.3880	-.4280	-.2970		
180.000		-.2480	-.1390	-.0770						

AMES 11-7X7 OA12 OBA ORBITER FUSELAGE (RBPB38)

MACH (2) = .899 BETA (5) = 8.360

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.1170	.3200	.3040			.2870		.2530	.2320	.2430	.2600	.3240
20.000	.0000		.4790	.0890	.2580	.2590			.2440		.2020				
40.000	.0000		.2890	-.0990	.0210	-.0190			-.0980		-.3870	-.3810	-.2160	-.0420	.1750
55.000	.0000		.0890	-.4160	-.3210	-.3420			-.2390		-.2920				
70.000	.0000		-.1810	-.6390	-.4900	-.0600			-.0640		-.1930	-.7050	-.6910	-.3200	-.5970
90.000	.0000	.3040	-.4260	-.7040	-.2550	.0280			-.0110		-.2820	-.8700	-.6250	-.1860	-.3420
105.000	.0000														
110.000	.0000														
120.000	.0000		-.6880	-.5550	-.2720	.1260			.0200		-.5990	-1.0000	-.4130	-.1840	-.1840
135.000	.0000														
142.000	.0000									-.8570					
150.000	.0000		-.7420	-.5670	-.1770	.2740			-.1190		-.6720	-.5850	-.2930	-.0210	-.0750
157.000	.0000							.1680							
162.000	.0000								-.3510						
165.000	.0000										-.6230	-.6160	-.3240	.0290	-.0450
169.000	.0000								-.3490						
177.000	.0000						.4700								
180.000	.0000	.0000	-.8080	-.6370	-.0820	.4220			-.0680		-.9720	-.5890	-.3500	[illegible]	-.0870

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.3480							-.1020		-.1660
40.000	.2510	.3120		.2580	.1730	-.0690	-.0820			-.2230
70.000		-.6870	-.8390	-.6300	-.5820	-.4280	-.5110	-.4420		
90.000		-.7070	-.8720	-.9620	-1.0210	-.3305	-.3800	-.3840		
105.000				-.7430	-.7530	-.6130	-.4010	-.4280		
110.000									-.4620	
120.000		-.4220	-.3570	-.4890	-.6480	-.8680	-.4640	-.3080	-.4530	
135.000				.3530	-.0090	-.6640	-.5890	-.3120		
150.000		-.2630	-.1290	.1790	-.1010	-.5430	-.5190	-.3180		
165.000		-.2360		.0840	.0060	-.4590	-.4310	-.3450		
180.000		-.2920	-.1490	-.0930						

DATE 17 SEP 75 TABULATED PRESSURE DATA - OA12A (RBPB39) (01 MAY 73)

AMES 11-707 OA12 OEA ORBITER FUSELAGE

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
bREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

BETA = .000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

MACH (1) = 1.099 ALPHA (1) = -4.550

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

Y/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.6870	-.5600	.2000			.1130		.0080	-.0740	-.1070	-.1600	-.0390
25.000	.0000		-.0320	-.6200	-.5400	.1790			.0960		-.0230				
40.000	.0000		.1060	-.5200	-.3980	.0510			-.0440		-.1610	-.1850	-.1790	-.1650	-.0580
55.000	.0000		.1710	-.4390	-.0990	.1440			.0740		-.0700				
75.000	.0000		.2100	-.3840	.0940	.1670			.1020		-.1340	-.3970	-.3320	-.0230	.0470
90.000	.0000	.8520	.2390	-.2950	.0760	.1640			.0740		-.1740	-.4680	-.4040	-.0320	.0310
105.000	.0000														
110.000	.0000								.0700		-.2120	-.5050	-.2760	-.0010	.0350
120.000	.0000		.3340	-.1090	.2050	.3060									
135.000	.0000									-.6350					
142.000	.0000								.4070		-.4240	-.3210	-.2160	-.1250	-.0170
150.000	.0000		.4050	.2230	.3770	.6550		.6170							
157.000	.0000								.3110						
162.000	.0000										-.7510	-.2920	-.3670	-.1170	.2520
165.000	.0000								.3310						
169.000	.0000						.9630								
172.000	.0000								.6120		-.6670	-.4940	-.1760	-.1250	.0310
180.000	.0000	.9370	.3610	.3150	.4440	.6780									
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0030							-.2700		-.2340					
40.000	-.0090	.0120		-.1030	-.1380	-.2080	-.2750			-.2140					
70.000		.1690	.1640	.1280	.1330	-.0740	-.1750	-.1350							
90.000		.1870	.2320	.1740	.0620	-.0990	-.1500	-.1400							
105.000				.1830	-.0180	-.1200	-.1500	-.1550							
110.000									-.3170						
120.000		.1870	.3640	.3040	-.1400	-.1750	-.1050	-.1290	-.2330						
135.000				.7270	.2770	-.2230	-.0630	-.0780							
150.000		.1820	.3970	.5480	.3740	-.0520	-.0430	-.0790							
165.000		.1830		.5190	.4360	.0450	-.0030	-.3020							
180.000		.1710	.3830	.4470											

DATE 17 SEP 75 TABULATED PRESSURE DATA - OA12A

AMES 11-7D7 OA12 OBA ORBITER FUSELAGE (RBPB39)

MACH (1) = 1.150 ALPHA (2) = -3.520

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.1444	-.6630	-.5260	.2020			.1240		.0220	-.0680	-.0930	-.1460	-.0340
25.000	.0000		.0620	-.5940	-.5120	.1810			.1090		-.0580				
45.000	.0000		.1320	-.4970	-.3740	.0680			-.0110		-.1320	-.1630	-.1620	-.1620	-.0480
55.000	.0000		.1890	-.4230	-.1950	.1600			.1900		-.0930				
75.000	.0000		.2220	-.3860	.1180	.1960			.1230		-.1110	-.3990	-.3290	-.0410	.0410
90.000	.0000	.0810	.2370	-.3120	.0880	.1900			.1090		-.1660	-.4630	-.4040	-.0470	.0260
105.000	.0000														
115.000	.0000														
125.000	.0000		.3140	-.0570	.2010	.3240			.0930		-.2120	-.5110	-.2870	-.0850	.0290
135.000	.0000									-.6340					
142.000	.0000										-.4310	-.3380	-.2260	-.1340	.0260
150.000	.0000		.3670	.1780	.3610	.6550			.4040						
157.000	.0000							.6200							
162.000	.0000								.3940						
165.000	.0000										-.7570	-.3060	-.2800	-.1280	.0250
169.000	.0000								.3140						
172.000	.0000						.9990								
180.000	.0000	.9500	.3180	.2710	.4210	.8740			.5990		-.6790	-.5070	-.1840	-.1310	.0270

X/LB	.5873	.6626	.7380	.7888	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0050							-.2430		-.2120
40.000	.0040	.0260		-.0890	-.1150	-.1760	-.2520			-.2050
70.000		.1270	.1370	.1150	.1190	-.0680	-.1780	-.1540		
90.000		.1470	.2080	.1800	.0530	-.1090	-.1570	-.1560		
105.000				.1770	-.0190	-.1260	-.1570	-.1670		
115.000									-.3140	
125.000		.1520	.3480	.3110	-.1340	-.1900	-.1150	-.1330	-.2390	
135.000				.7170	.2710	-.2310	-.0820	-.0840		
150.000		.1460	.3840	.5180	.3610	-.0670	-.0620	-.0960		
165.000		.1370		.5080	.4210	.0310	-.0230	-.3120		
180.000		.1290	.3480	.4320						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB39)

MACH (1) = 1.100 ALPHA (3) = -1.490

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1350	.1506	.1561	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.500	.0000	.0000	.0000	-.6260	-.4640	.2080			.1410		.0410	-.0380	-.0720	-.1250	-.0970
25.000	.0000		.0640	-.5550	-.4640	.1930			.1300		.0190				
45.000	.0000		.1770	-.4580	-.3370	.1120			.0500		-.0760	-.1210	-.1310	-.1460	-.0370
55.000	.0000		.2220	-.3970	-.2020	.2010			.1400		-.0170				
75.000	.0000		.2350	-.3700	.0650	.2330			.1530		-.0790	-.3080	-.3290	-.1850	.0180
95.000	.0000	.0640	.2300	-.3170	.1280	.2340			.1370		-.1430	-.4600	-.4130	-.0700	.0640
105.000	.0000														
115.000	.0000														
125.000	.0000		.2700	-.1570	.1970	.3490			.1330		-.2250	-.5160	-.3140	-.0810	.0180
135.000	.0000									-.6400					
142.000	.0000										-.4530	-.3610	-.2520	-.1250	.0210
150.000	.0000		.3030	.0540	.3210	.6520			.3920						
157.000	.0000							.6130							
162.000	.0000								.2790						
165.000	.0000										-.7800	-.3270	-.2630	-.1310	.0220
169.000	.0000								.2780						
172.000	.0000						.9440								
180.000	.0000	.0930	.2280	.1720	.3710	.8540			.5640		-.7100	-.5300	-.1940	-.1440	.0200
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0092					
PHI															
.000	.0130							-.2160		-.2040					
45.000	.0180	.0580		-.0370	-.0600	-.1310	-.2020			-.1980					
75.000		.0490	.0340	.0780	.1050	-.1030	-.1970	-.1900							
95.000		.0820	.1420	.1350	.0380	-.1170	-.1920	-.1860							
105.000				.1460	-.0200	-.1360	-.1950	-.1910							
115.000									-.3230						
125.000		.0900	.3030	.3110	-.1280	-.2050	-.1430	-.1550	-.2500						
135.000				.6820	.2520	-.2460	-.1010	-.1000							
150.000		.0850	.3420	.4550	.3270	-.0960	-.0900	-.1240							
165.000		.0790		.4650	.3940	.0050	-.0560	-.3320							
180.000		.0650	.3050	.3990											

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBPB39)

MACH (1) = 1.098 ALPHA (4) = .540

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.0000	.0000	.0000	-.5300	-.4060	.2190			.1570		.0640	-.0090	-.0480	-.1030	-.0480
25.000	.0000		.1280	-.5110	-.4110	.2050			.1500		.0450				
40.000	.0000		.2180	-.4130	-.2910	.1600			.1510		-.0240	-.0750	-.1020	-.1250	-.0240
55.000	.0000		.2500	-.3700	-.1890	.2310			.1760		.0200				
75.000	.0000		.2490	-.3640	-.1480	.2590			.1820		-.0450	-.3910	-.3280	-.1330	.0030
90.000	.0000	.0640	.2200	-.3280	.1680	.2690			.1790		-.1220	-.4590	-.4030	-.1070	-.0150
105.000	.0000														
110.000	.0000														
125.000	.0000		.2220	-.2400	.2130	.3710			.1780		-.2400	-.5220	-.3530	-.0920	.0230
135.000	.0000														
142.000	.0000									-.6430					
150.000	.0000		.2330	-.0830	.3020	.6480			.3780		-.4760	-.3850	-.2830	-.1210	.0150
157.000	.0000							.6100							
162.000	.0000								.2570						
165.000	.0000										-.8010	-.3460	-.2740	-.1360	.0090
169.000	.0000								.2390						
172.000	.0000						.9280								
180.000	.0000	.8310	.1510	.0360	.3370	.8360			.5280		-.7390	-.5310	-.2010	-.1530	.0150

X/LB	.5873	.6626	.7389	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0230							-.2030		-.1950
40.000	.0290	.1000		.0210	.0070	-.0850	-.1800			-.1910
75.000		.0060	-.0610	.0270	.0790	-.1230	-.2210	-.2190		
90.000		.0430	.0710	.0920	.0930	-.1420	-.2300	-.2050		
105.000				.1220	-.0470	-.1530	-.2330	-.2100		
110.000									-.3260	
125.000		.0620	.2480	.2880	-.1290	-.2380	-.1780	-.1740	-.2640	
135.000				.6440	.2300	-.2670	-.1360	-.1290		
150.000		.0610	.2980	.4120	.2910	-.1240	-.1190	-.1560		
165.000		.0560		.4210	.3640	-.0260	-.0860	-.3480		
180.000		.0460	.2740	.3670						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7D7 OA12 O2A ORBITER FUSELAGE (RBPB39)

MACH (1) = 1.116 ALPHA (5) = 2.510

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0073	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.5450	-.3360	.2290			.1780		.0860	.0190	-.0210	-.0770	-.0540
25.000	.0000		.1900	-.4640	-.3550	.2200			.1770		.0710				
40.000	.0000		.2650	-.3680	-.2500	.1900			.1510		.0220	-.0350	-.0730	-.1050	-.0160
55.000	.0000		.2800	-.3420	-.1800	.2570			.1990		.0510				
70.000	.0000		.2620	-.3540	-.1730	.2750			.2050		-.0190	-.3880	-.3290	-.1880	-.0270
90.000	.0000	.0660	.2110	-.3460	-.1030	.2900			.2090		-.1010	-.4620	-.3930	-.1530	-.0340
105.000	.0000														
110.000	.0000														
125.000	.0000		.1820	-.2820	.2390	.3880			.2160		-.2380	-.5310	-.4040	-.1070	-.0040
135.000	.0000									-.6430					
142.000	.0000														
150.000	.0000		.1730	-.2190	.2950	.6450			.3660		-.4910	-.4140	-.3480	-.1220	.0090
157.000	.0000							.6080							
162.000	.0000								.2400						
165.000	.0000										-.8190	-.3720	-.2940	-.1310	.0150
169.000	.0000								.2080						
172.000	.0000						.9170								
180.000	.0000	.7730	.6810	-.1190	.3210	.8220			.4970		-.7660	-.5150	-.2180	-.1590	.0380

X/LB	.5872	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0390							-.1790		-.1710
40.000	.0390	.1500		.1110	.0490	-.0560	-.1550			-.1860
70.000		-.0140	-.1500	-.0320	.0560	-.1460	-.2380	-.2440		
90.000		.0260	-.0190	.0470	-.0510	-.1560	-.2590	-.2350		
105.000				.0610	-.0630	-.1720	-.2680	-.2340		
110.000									-.3430	
125.000		.0470	.1980	.2600	-.1260	-.2610	-.2100	-.2040	-.2750	
135.000				.5650	.2170	-.2870	-.1630	-.1580		
150.000		.0540	.2450	.3830	.2560	-.1530	-.1530	-.1840		
165.000		.0510		.3880	.3220	-.0510	-.1200	-.3650		
180.000		.0500	.2140	.3350						

AMES 11-7U7 OA12 C2A ORBITER FUSELAGE (RBFB39)

MACH (1) = 1.099 ALPHA (6) = 4.050

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.0000	.0000	.0000	-.5120	-.2830	.2390			.1930		.1080	.0420	.0030	-.0530	-.0450
25.000	.0000		.2350	-.4260	-.3480	.2350			.1920		.0950				
40.000	.0000		.2990	-.3340	-.2140	.2270			.1830		.0560	-.0050	-.0490	-.0860	-.0150
55.000	.0000		.3040	-.3180	-.1670	.2690			.2220		.0720				
70.000	.0000		.2740	-.3420	-.1910	.2840			.2260		.0020	-.3780	-.3320	-.2190	-.0300
90.000	.0000	.8620	.2040	-.3460	-.2090	.3050			.2310		-.0840	-.4610	-.3810	-.1860	-.0500
105.000	.0000														
110.000	.0000														
120.000	.0000		.1520	-.3040	.2440	.3990			.2480		-.2310	-.5350	-.4390	-.1280	-.0120
135.000	.0000														
142.000	.0000									-.6350					
150.000	.0000		.1310	-.2790	.3120	.6420			.3570		-.5000	-.4350	-.3270	-.1250	.0120
157.000	.0000							.6060							
162.000	.0000								.2260						
165.000	.0000										-.8270	-.3860	-.3130	-.1260	.0160
169.000	.0000								.1810						
172.000	.0000						.9050								
180.000	.0000	.7280	.0330	-.1750	.3350	.8110			.4760		-.7820	-.4780	-.2260	-.1530	.0330

X/LB	.5873	.6625	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0380							-.1600		-.1540
40.000	.0580	.1950		.1490	.0750	-.0340	-.1320			-.1700
70.000		-.0170	-.2040	-.1090	.0260	-.1570	-.2480	-.2710		
90.000		.0210	-.0720	-.0040	-.0760	-.1680	-.2800	-.2640		
105.000				.0410	-.0870	-.1840	-.2880	-.2660		
110.000									-.3650	
120.000		.0420	.1810	.2590	-.1350	-.2840	-.2250	-.2390	-.2800	
135.000				.4930	.1970	-.3010	-.1320	-.1780		
150.000		.0530	.2190	.3570	.2310	-.1680	-.1730	-.2070		
165.000		.0520		.3460	.2740	-.0650	-.1380	-.3740		
180.000		.0520	.1820	.2900						

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBPB39)

MACH (1) = 1.100 ALPHA (7) = 6.630

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/L9	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.4480	-.1840	.2530			.2210		.1470	.0810	.0440	-.0110	-.0430
25.000	.0000		.3140	-.3580	-.2220	.2530			.2240		.1360				
40.000	.0000		.3610	-.2730	-.1450	.2700			.2310		.1030	.0350	-.0110	-.0470	-.0010
55.000	.0000		.3420	-.2780	-.1360	.2760			.2390		.1050				
75.000	.0000		.2890	-.3230	-.1990	.2950			.2470		.0380	-.3620	-.3330	-.2670	-.0650
90.000	.0000	.8540	.1920	-.3560	-.1950	.3220			.2590		-.0570	-.4620	-.3690	-.[illegible]	-.0820
105.000	.0000														
115.000	.0000														
125.000	.0000		.0960	-.3410	-.1330	.4130			.2950		-.2330	-.5380	-.4750	-.1600	-.0270
135.000	.0000														
142.000	.0000									-.6110					
150.000	.0000		.0670	-.3520	.0900	.6400			.3420		-.5170	-.4750	-.3540	-.1350	-.0130
157.000	.0000							.6000							
162.000	.0000								.2060						
165.000	.0000										-.8390	-.4670	-.3390	-.1250	.0040
169.000	.0000								.1420						
172.000	.0000						.8850								
180.000	.0000	.6560	-.0490	-.2590	-.0030	.7950			.4270		-.8090	-.4160	-.2430	-.1410	-.0110

X/L9	.5872	.6526	.7197	.7865	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0550							-.1210		-.1200
40.000	.1730	.2610		.2020	.1190	.0090	-.0870			-.1580
75.000		-.0280	-.2810	-.2370	-.0500	-.2020	-.2720	-.3210		
90.000		.0150	-.1780	-.0650	-.1630	-.1840	-.3170	-.3000		
105.000				.0120	-.1570	-.2150	-.3300	-.3270		
115.000									-.3660	
125.000		.0300	.1240	.2400	-.1410	-.3500	-.2480	-.2710	-.3290	
135.000				.4100	.1570	-.3340	-.2350	-.2090		
150.000		.0550	.1580	.3020	.1860	-.2010	-.2170	-.2520		
165.000		.0630		.2930	.2580	-.1020	-.1630	-.3970		
180.000		.0720	.1300	.2470						

AMES 11-7x7 OA12 CEA ORBITER FUSELAGE (RBPB39)

MACH (1) = 1.150 ALPHA (4) = 8.590

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LS	.0000	.0075	.0188	.0339	.0692	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3388	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.3990	-.1040	.2650			.2440		.1770	.1170	.0750	.027	.0350
2.000	.0000		.3730	-.3040	-.1500	.2650			.2470		.1650				
4.000	.0000		.4020	-.2270	-.0830	.2890			.2610		.1310	.0650	.0140	-.0160	.0250
55.000	.0000		.3700	-.2520	-.1090	.2680			.2460		.1220				
7.000	.0000		.2980	-.3090	-.1980	.2960			.2590		.0620	-.3540	-.3370	-.2890	-.1130
9.000	.0000	.8430	.1810	-.3680	-.1650	.3280			.2780		-.0350	-.4620	-.3720	-.3270	-.1310
105.000	.0000														
110.000	.0000														
120.000	.0000		.0550	-.3730	-.1960	.4200			.3280		-.2360	-.5430	-.4590	-.1980	-.1570
135.000	.0000									-.5720					
142.000	.0000														
150.000	.0000		.0030	-.3990	-.1140	.6350			3280		-.5320	-.5030	-.3780	-.14 0	-.3 0
157.000	.0000							.5920							
162.000	.0000								.1680						
165.000	.0000										-.8420	-.4110	-.3630	-.1190	-.1450
169.000	.0000								.1140						
172.000	.0000						.8650								
180.000	.0000	.5980	-.1110	-.3150	-.1110	.7810			.3960		-.8310	-.3950	-.2620	-.1150	.0010

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0520							-.0950		-.0920
4.000	.1210	.3120		.2470	.1610	.0410	-.0550			-.1540
7.000		-.0510	-.3370	-.2990	-.1570	-.2150	-.3110	-.3440		
9.000		-.0180	-.2290	-.0970	-.2460	-.2250	-.3380	-.3490		
105.000				-.0220	-.1830	-.2820	-.3300	-.3720		
110.000									-.3940	
120.000		.0140	.1020	.2270	-.1480	-.4110	-.2920	-.2910	-.3730	
135.000				.3630	.1300	-.3540	-.2800	-.2490		
150.000		.0370	.1040	.3070	.1520	-.2310	-.2590	-.2980		
165.000		.0690		.2730	.2960	-.1420	-.1880	-.4150		
180.000		.0810	.0860	.2280						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7X7 OA12 OBA ORBITER FUSELAGE (RBFB39)

MACH (1) = 1.099 ALPHA (9) = 9.97

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.3610	-.0170	.2700			.2610		.1980	.1380	.1010	.0540	.0650
20.000	.0000		.4150	-.2630	-.0930	.2760			.2640		.1890				
40.000	.0000		.4310	-.1940	-.0360	.3040			.2750		.1470	.0810	.0340	.0070	.0570
55.000	.0000		.3870	-.2320	-.0910	.2660			.2450		.1300				
70.000	.0000		.3010	-.2980	-.2000	.2940			.2620		.0740	-.3450	-.3320	-.3030	-.1680
90.000	.0000	.0340	.1720	-.3750	-.1660	.3290			.2840		-.0220	-.4590	-.3820	-.3670	-.1630
105.000	.0000														
110.000	.0000														
120.000	.0000		.0280	-.3940	-.2280	.4210			.3480		-.2400	-.5450	-.5220	-.2170	-.0840
135.000	.0000									-.5340					
142.000	.0000								.3190		-.5430	-.5240	-.3910	-.1390	-.0520
150.000	.0000		-.0330	-.4280	-.1580	.6340		.5890							
157.000	.0000								.1770						
162.000	.0000										-.8340	-.4100	-.3810	-.1490	-.0110
165.000	.0000								.0960						
169.000	.0000						.8500								
172.000	.0000								.3730		-.8430	-.3960	-.2770	-.1110	-.0240
180.000	.0000	.5530	-.1530	-.3510	-.1650	.7710									
X/B	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	.1460							-.0700		-.0840					
40.000	.1680	.3400		.2780	.1910	.0610	-.0290			-.1560					
70.000		-.0930	-.3700	-.3390	-.2510	-.2480	-.3440	-.2840							
90.000		-.0410	-.2650	-.1360	-.3010	-.2790	-.3290	-.3300							
105.000				-.0520	-.2030	-.3420	-.3330	-.3570							
110.000									-.2790						
120.000		.0490	.0700	.2110	-.1600	-.4330	-.3490	-.2770	-.1900						
135.000				.3500	.1080	-.3630	-.3000	-.2910							
150.000		.0260	.0630	.3180	.1160	-.2710	-.2930	-.3260							
165.000		.0710		.2640	.3110	-.1610	-.2120	-.4210							
180.000		.0850	.0630	.2180											

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBFB39)

MACH (1) = 1.101 ALPHA (1U) = 14.97U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.1680	.2750	.3310			.3230		.2780	.2360	.2040	.1680	.1890
25.000	.0000		.5610	-.1090	.2650	.3320			.3320		.2740				
40.000	.0000		.5410	-.0600	.2130	.3290			.3110		.1780	.1330	.1010	.0990	.1680
55.000	.0000		.4760	-.1510	.0480	.1840			.2180		.1450				
70.000	.0000		.3220	-.2520	-.1460	.2610			.2690		.1190	-.3200	-.3150	-.3580	-.4240
90.000	.0000	.7960	.1430	-.3945	-.0610	.3010			.3060		.0210	-.4480	-.4560	-.4070	-.2630
105.000	.0000														
110.000	.0000														
120.000	.0000		-.0710	-.4740	-.2650	.4100			.4130		-.2720	-.5750	-.5990	-.3230	-.1370
135.000	.0000														
142.000	.0000									-.4330					
150.000	.0000		-.1680	-.5320	-.2890	.6230			.2930		-.5760	-.5960	-.4280	-.2070	-.1160
157.000	.0000							.5930							
162.000	.0000								.1540						
165.000	.0000										-.7430	-.4160	-.4150	-.0980	-.0185
169.000	.0000								.0420						
172.000	.0000						.8020								
180.000	.0000	.4370	-.3070	-.4800	-.3050	.7340			.3050		-.8770	-.3630	-.3140	-.0970	-.0140

X/LB	.5873	.6626	.7380	.7869	.8283	.8648	.9262	.9639	1.0015	1.0392
PHI										
.000	.3250							.0160		-.0430
40.000	.3270	.4450		.3770	.2880	.1400	.0890			-.1430
70.000		-.1850	-.5200	-.5190	-.5320	-.4470	-.1880	-.4180		
90.000		-.0730	-.4240	-.3480	-.4960	-.4690	-.4260	-.2630		
105.000				-.1890	-.3500	-.4250	-.4690	-.2960		
110.000									-.3870	
120.000		-.0090	-.1090	.1070	-.2120	-.4430	-.4100	-.3980	-.3570	
135.000				.3100	.0330	-.3710	-.3170	-.3390		
150.000		-.0260	-.0830	.3480	.0670	-.3710	-.3770	-.3820		
165.000		.0700		.2390	.3180	-.2080	-.2650	-.4570		
180.000		.0840	-.0320	.1880						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7D7 OA12 O2A ORBITER FUSELAGE (RBPB39)

MACH (2) = 1.247 ALPHA (1) = -4.44D

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.4850	-.4520	.0410			.1320		.1010	.0190	-.0330	-.0920	-.0760
20.000	.0000		.1140	-.4340	-.3900	.0210			.1100		.0690				
40.000	.0000		.2330	-.3470	-.2810	-.1930			-.0790		-.1180	-.1200	-.1090	-.1270	-.0670
55.000	.0000		.2930	-.2740	-.1720	.0660			.0670		-.0320				
75.000	.0000		.3270	-.2370	-.1450	.1910			.1470		-.0970	-.3040	-.2940	-.0470	.0400
90.000	.0000	.9450	.3510	-.1690	-.0560	.2250			.1550		-.1330	-.3560	-.3200	-.0650	.0290
105.000	.0000														
110.000	.0000														
120.000	.0000		.4230	-.0320	.1900	.3890			.1930		-.1610	-.4000	-.2420	-.1390	.0150
135.000	.0000														
142.000	.0000									-.4360					
150.000	.0000		.4740	.1430	.3230	.7330			.5220		-.3100	-.2740	-.1910	-.1170	-.0200
157.000	.0000							.7150							
162.000	.0000								.4250						
165.000	.0000										-.5650	-.2400	-.2270	-.1070	-.0270
169.000	.0000								.4380						
172.000	.0000						1.0500								
180.000	.0000	1.0490	.4170	.2530	.3740	.9510			.7000		-.4880	-.3870	-.1320	-.1110	-.0350

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0250							-.2080		-.2210
40.000	-.0480	-.0290		-.1010	-.1280	-.1790	-.2300			-.2010
70.000		-.0160	.0680	.1260	.1730	.0100	-.0800	-.0560		
90.000		.0090	.1570	.1740	.0990	-.0010	-.0790	-.0470		
105.000				.1700	.0670	-.0150	-.0800	-.0600		
110.000									-.1620	
120.000		.0180	.2770	.3560	-.0130	-.1340	-.0350	-.0300	-.1150	
135.000				.7760	.3690	-.1240	-.0280	.0060		
150.000		.0300	.3070	.4830	.4580	.0560	.0250	-.0040		
165.000		.0240		.5180	.5160	.1680	.0910	-.2130		
180.000		.0360	.2050	.4710						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBPB39)

MACH (2) = 1.240 ALPHA (2) = -3.47

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3208	.3953	.5126
PHI															
.000	.0000	.0000	.0000	-.4700	-.4340	.0380			.1290		.1080	.0330	-.0230	-.0830	-.0710
20.000	.0000		.1360	-.4180	-.3750	.0180			.1180		.0790				
40.000	.0000		.2530	-.3310	-.2650	-.1340			-.0490		-.1930	-.1010	-.0960	-.1160	-.0630
55.000	.0000		.3060	-.2640	-.1630	.0870			.0340		-.0130				
70.000	.0000		.3360	-.2330	-.1340	.2440			.1630		-.0760	-.2960	-.2840	-.0580	.0330
90.000	.0000	.9480	.3480	-.1700	-.0630	.2380			.1720		-.1240	-.3450	-.3190	-.0720	.0170
105.000	.0000														
110.000	.0000														
125.000	.0000		.4070	-.0520	.1750	.3960			.2090		-.1620	-.4030	-.2490	-.1310	.0020
135.000	.0000									-.4440					
142.000	.0000										-.3160	-.2830	-.2010	-.1240	-.0240
150.000	.0000		.4510	.0890	.2990	.7290			.5160						
157.000	.0000							.7130							
162.000	.0000								.4150						
165.000	.0000										-.5740	-.2550	-.2110	-.1110	-.0270
169.000	.0000								.4220						
172.000	.0000						1.0440								
180.000	.0000	1.0240	.3870	.2010	.3460	.9410			.6840		-.4990	-.4660	-.1420	-.1150	-.0310
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9252	.9639	1.0015	1.0392					
PHI															
.000	-.0250							-.1930		-.1990					
40.000	-.0390	-.0160		-.0780	-.1130	-.1600	-.2090			-.1890					
70.000		-.0240	.0360	.0940	.1520	-.1650	-.1940	-.1800							
90.000		.0610	.1160	.1480	.0750	-.0110	-.0970	-.0710							
105.000				.1590	.0500	-.0330	-.1030	-.0790							
110.000									-.1830						
125.000		.0110	.2480	.3520	-.0110	-.1510	-.0500	-.1470	-.1240						
135.000				.7420	.3570	-.1350	-.0500	-.1680							
150.000		.0170	.2800	.4580	.4360	.0420	.1680	-.0210							
165.000		.0160		.4940	.4910	.1540	.0780	-.2220							
180.000		.0240	.1740	.4540											

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB39)

MACH (2) = 1.247 ALPHA (3) = -1.470

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.4380	-.3900	.0450			.1300		.1260	.0540	.0030	-.0620	-.0670
20.000	.0000		.1910	-.3780	-.3270	.0230			.1190		.1040				
40.000	.0000		.3010	-.2920	-.2260	-.0450			.0160		-.0290	-.0570	-.0650	-.0920	-.0410
55.000	.0000		.3390	-.2380	-.1410	.1260			.1540		.0390				
75.000	.0000		.3500	-.2210	-.1290	.2170			.1990		-.0260	-.2830	-.2590	-.0860	.0140
90.000	.0000	.9540	.3460	-.1750	-.0770	.2610			.2090		-.0950	-.3340	-.3210	-.0840	.0460
105.000	.0000														
110.000	.0000														
120.000	.0000		.3710	-.0810	.1140	.4110			.2420		-.1620	-.4000	-.2670	-.1120	-.0420
135.000	.0000														
142.000	.0000									-.4420					
150.000	.0000		.3970	.0160	.2440	.7210			.5010		-.3350	-.3070	-.2200	-.1290	-.0260
157.000	.0000							.7070							
162.000	.0000								.3940						
165.000	.0000										-.5920	-.2740	-.2170	-.1190	-.0310
169.000	.0000								.3870						
172.000	.0000						1.0320								
180.000	.0000	.9750	.3250	.1200	.2870	.9230			.6510		-.5240	-.4260	-.1540	-.1240	-.0330

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0190							-.1500		-.1640
40.000	-.0220	.0030		-.0360	-.0700	-.1200	-.1650			-.1720
70.000		-.0440	-.0360	.0210	.1040	-.0380	-.1150	-.1260		
90.000		-.0110	.0490	.1060	.0320	-.0360	-.1330	-.1120		
105.000				.1290	.0130	-.0650	-.1470	-.1180		
110.000									-.1980	
120.000		.0000	.2030	.3460	-.0130	-.1890	-.0810	-.0870	-.1470	
135.000				.6820	.3320	-.1590	-.0800	-.0390		
150.000		.0100	.2440	.4060	.3920	.0100	-.0190	-.0580		
165.000		.0110		.4400	.4510	.1250	.0420	-.2410		
180.000		.0180	.1450	.4050						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPB39)

AMES 11-7D7 OA12 OBA ORBITER FUSELAGE

MACH (2) = 1.248 ALPHA (4) = .52D

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0186	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.4010	-.3390	.1470			.1320		.1440	.0770	.0290	-.0400	-.0540
20.000	.0000		.2540	-.3380	-.2820	.0310			.1270		.1280				
40.000	.0000		.3440	-.2530	-.1880	-.0090			.0810		.0210	-.0130	-.0360	-.0680	-.0280
55.000	.0000		.3710	-.2140	-.1160	.1440			.2010		.0760				
70.000	.0000		.3680	-.2090	-.1200	.2270			.2370		.0130	-.2770	-.2500	-.1220	-.0690
90.000	.0000	.9580	.3400	-.1820	-.0830	.2810			.2490		-.0630	-.3320	-.3210	-.1150	-.0170
105.000	.0000														
110.000	.0000														
120.000	.0000		.3370	-.1090	.0540	.4220			.2730		-.1550	-.3970	-.2920	-.1190	-.0180
135.000	.0000									-.4450					
142.000	.0000														
150.000	.0000		.3440	-.0490	.1860	.7150			.4870		-.3460	-.3290	-.2350	-.1370	-.0230
157.000	.0000							.7020							
162.000	.0000								.3760						
165.000	.0000										-.6080	-.2880	-.2290	-.1290	-.0360
169.000	.0000								.3540						
172.000	.0000						1.0200								
180.000	.0000	.9230	.2620	.0500	.2180	.9050			.6170		-.5470	-.4520	-.1600	-.1290	-.0320

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0130							-.1110		-.1330
40.000	-.0480	.0200		.0090	-.0190	-.0720	-.1290			-.1540
70.000		-.0820	-.0930	-.0530	.0580	-.0640	-.1330	-.1620		
90.000		-.0430	-.0180	.0640	-.0210	-.0670	-.1660	-.1490		
105.000				.1100	-.0240	-.0950	-.1780	-.1570		
110.000									-.2230	
120.000		-.0240	.1380	.3110	-.0210	-.2270	-.1230	-.1140	-.1640	
135.000				.6240	.2990	-.1860	-.1090	-.0690		
150.000		-.0040	.2020	.3550	.3440	-.0230	-.0490	-.0890		
165.000		.0030		.3820	.4070	.0900	.0070	-.2650		
180.000		.0120	.1210	.3560						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPB39)

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE

MACH (2) = 1.250 ALPHA (5) = 2.580

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.3640	-.2790	.0540			.1080		.1600	.0990	.0520	-.0110	-.0360
20.000	.0000		.3160	-.2950	-.2340	.0520			.1220		.1450				
40.000	.0000		.3880	-.2130	-.1460	.0360			.1270		.0740	.0270	-.0040	-.0460	-.0190
55.000	.0000		.3990	-.1890	-.0960	.1190			.2290		.1080				
75.000	.0000		.3800	-.2010	-.1180	.2190			.2640		.0490	-.2670	-.2490	-.1470	-.0330
90.000	.0000	.9600	.3330	-.1890	-.0960	.2910			.2820		-.0410	-.3310	-.3130	-.1450	-.0460
105.000	.0000														
115.000	.0000								.3080		-.1560	-.3960	-.3210	-.1330	-.0370
120.000	.0000		.2990	-.1360	.0080	.4310									
135.000	.0000									-.4490					
142.000	.0000								.4770		-.3610	-.3550	-.2550	-.1430	-.0330
150.000	.0000		.2890	-.1080	.1160	.7070		.7000							
157.000	.0000								.3560						
162.000	.0000										-.0240	-.3000	-.2460	-.1370	-.0320
165.000	.0000								.3230						
169.000	.0000						1.0000								
172.000	.0000								.5850		-.5700	-.4720	-.1710	-.1390	-.0310
180.000	.0000	.8700	.2030	-.0140	.1480	.8890									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0040							-.0760		-.1010
20.000	.0100	.0380		.0630	.0360	-.0280	-.0870			-.1310
40.000		-.1040	-.1420	-.1210	-.0040	-.0950	-.1580	-.2000		
75.000		-.0620	-.0770	.0290	-.0940	-.0920	-.1910	-.1820		
90.000				.0610	-.0450	-.1340	-.2050	-.1950		
105.000									-.2480	
115.000									-.1830	
120.000		-.0390	.1170	.2830	-.0170	-.2510	-.1720	-.1420		
135.000				.5350	.2790	-.2790	-.1380	-.1060		
150.000		-.0180	.1610	.3340	.3000	-.0570	-.0810	-.1190		
165.000		-.0080		.3440	.3580	.0580	-.0280	-.2830		
180.000		-.0010	.0840	.3150						

AMES 11-7X7 OA12 OBA ORBITER FUSELAGE (RBFB39)

MACH (2) = 1.248 ALPHA (6) = 4.57

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.3240	-.2170	.0730			.1050		.1750	.1220	.0790	.0140	-.0180
20.000	.0000		.3700	-.2510	-.1820	.0690			.1240		.1650				
40.000	.0000		.4270	-.1720	-.1060	.0810			.1680		.1130	.0650	.0230	-.0190	.0010
55.000	.0000		.4270	-.1620	-.0760	.1140			.2470		.1340				
70.000	.0000		.3920	-.1890	-.1110	.1980			.2810		.0790	-.2590	-.2500	- 1700	-.0660
90.000	.0000	.9530	.3240	-.1970	-.1050	.2910			.3050		-.0160	-.3320	-.3020	- 1810	-.0750
105.000	.0000														
110.000	.0000														
120.000	.0000		.2630	-.1630	-.0360	.4360			.3380		-.1540	-.3910	-.3380	-.1550	-.0540
135.000	.0000														
142.000	.0000									-.4520					
150.000	.0000		.2380	-.1570	.0560	.6980			.4640		-.3740	-.3790	-.2750	-.1410	-.0410
157.000	.0000							.6990							
162.000	.0000								.3420						
165.000	.0000										-.6340	-.3690	-.2650	-.1380	-.0350
169.000	.0000								.2960						
172.000	.0000						.9950								
180.000	.0000	.8150	.1430	-.0710	.0830	.8700			.5530		-.5880	-.4860	-.1780	-.1470	-.0320

X/LB	.5873	.6626	.7380	.7889	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0160							-.0390		-.0770
40.000	.0230	.0620		.1150	.0850	.0190	-.0460			-.1180
70.000		-.1280	-.1860	-.1850	-.0840	-.1160	-.1760	-.2360		
90.000		-.0780	-.1160	-.0100	-.1250	-.1370	-.2170	-.2120		
105.000				.0490	-.0680	-.1760	-.2280	-.2280		
110.000									-.2650	
120.000		-.0530	.1080	.2640	-.0220	-.2810	-.2220	-.1610	-.2150	
135.000				.4280	.2440	-.2280	-.1530	-.1380		
150.000		-.0250	.1460	.2900	.2550	-.0790	-.1030	-.1510		
165.000		-.0150		.3010	.2820	.0320	-.0590	-.2980		
180.000		-.0690	.0650	.2640						

AMES 11-7D7 OA12 OEA ORBITER FUSELAGE (RBPB39)

MACH (2) = 1.248 ALPHA (7) = 6.670

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.2790	-.1420	.1010			.1250		.1350	.1450	.1090	.0450	.0180
20.000	.0000		.4280	-.2920	-.1190	.0970			.1320		.1810				
40.000	.0000		.4730	-.1270	-.0550	.1100			.1890		.1440	.1030	.0520	.0190	.0260
55.000	.0000		.4570	-.1340	-.0510	.1160			.2600		.1650				
70.000	.0000		.4040	-.1750	-.1050	.1380			.2930		.1110	-.2450	-.2430	-.1850	-.1170
90.000	.0000	.9470	.3170	-.2690	-.1220	.2680			.3270		.0170	-.3240	-.2890	-.2140	-.1150
105.000	.0000														
110.000	.0000														
120.000	.0000		.2220	-.1910	-.0650	.4430			.3630		-.1420	-.3870	-.3530	-.1820	-.0840
135.000	.0000														
142.000	.0000									-.4480					
150.000	.0000		.1840	-.2040	-.0050	.6870			.4570		-.3840	-.4080	-.2920	-.1400	-.0490
157.000	.0000							.7030							
162.000	.0000								.3290						
165.000	.0000										-.6420	-.3160	-.2820	-.1370	-.0380
169.000	.0000								.2720						
172.000	.0000						.9860								
180.000	.0000	.7580	.0810	-.1270	.0150	.8390			.5240		-.6060	-.4840	-.1840	-.1510	-.0360

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0440							-.0040		-.0520
40.000	.0400	.0820		.1730	.1420	.0740	.0000			-.1040
70.000		-.1450	-.2230	-.2370	-.1520	-.1350	-.2100	-.2550		
90.000		-.0950	-.1470	-.0430	-.1590	-.1870	-.2410	-.2530		*
105.000				.0190	-.0870	-.2080	-.2790	-.2570		
110.000									-.2870	
120.000		-.0620	.0920	.2360	-.0260	-.2980	-.2520	-.2060	-.2340	
135.000				.3490	.2060	-.2420	-.1760	-.1620		
150.000		-.0060	.1290	.2480	.2140	-.0960	-.1250	-.1710		
165.000		-.0230		.2600	.2570	.0130	-.0650	-.3020		
180.000		-.0150	.0480	.2130						

AMES 11-7X7 OA12 O2A ORBITER FUSELAGE (RBFB39)

MACH (2) = 1.249 ALPHA (8) = 8.650

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5121
PHI															
.000	.0000	.0000	.0000	-.2340	-.0580	.1290			.1490		.2050	.1710	.1400	.0860	.0530
20.000	.0000		.4850	-.1520	-.0570	.1270			.1440		.1970				
40.000	.0000		.5150	-.0820	-.0080	.1380			.1740		.1690	.1330	.0860	.0490	.0570
55.000	.0000		.4850	-.1060	-.0310	.1580			.2500		.1780				
75.000	.0000		.4110	-.1610	-.1060	.1250			.2990		.1350	-.2350	-.2390	-.2020	-.1780
90.000	.0000	.9380	.3030	-.2180	-.1390	.2140			.3420		.0430	-.3200	-.2960	-.2480	-.1800
105.000	.0000														
110.000	.0000														
125.000	.0000		.1830	-.2210	-.0970	.4410			.3730		-.1350	-.3870	-.3850	-.2210	-.1660
135.000	.0000														
142.000	.0000									-.4340					
150.000	.0000		.1280	-.2430	-.0640	.6720			.4500		-.3930	-.4340	-.3120	-.1440	-.0640
157.000	.0000							.7130							
162.000	.0000								.3190						
165.000	.0000										-.6510	-.3170	-.3010	-.1310	-.0460
169.000	.0000								.2520						
172.000	.0000						.9750								
180.000	.0000	.7000	.0210	-.1780	-.0410	.8070			.4970		-.6230	-.4610	-.1960	-.1530	-.0420

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0690							.0260		-.0280
40.000	.0760	.1010		.2370	.1920	.1220	.0400			-.0910
75.000		-.1680	-.2560	-.2850	-.2250	-.2120	-.2210	-.2780		
90.000		-.1160	-.1590	-.0950	-.1930	-.2320	-.2840	-.2660		
105.000				-.0250	-.1060	-.2410	-.3260	-.2760		
110.000									-.2940	
120.000		-.0700	.0790	.1950	-.0320	-.3180	-.2800	-.2520	-.2540	
135.000				.2850	.1820	-.2570	-.1900	-.1830		
150.000		-.0540	.0800	.2290	.2070	-.1170	-.1610	-.1970		
165.000		-.0350		.2250	.3260	-.0260	-.0910	-.3200		
180.000		-.0240	.0240	.2010						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPB39)

AMES 11-7D7 OA12 OBA ORBITER FUSELAGE

MACH (2) = 1.246 ALPHA (9) = 10.030

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5126
PHI															
.000	.0000	.0000	.0000	-.2030	.0040	.1510			.1620		.2120	.1850	.1590	.1030	.0780
20.000	.0000		.5240	-.1210	-.0120	.1520			.1650		.2040				
40.000	.0000		.5420	-.0550	.0270	.1560			.1790		.1810	.1460	.0960	.0600	.0760
55.000	.0000		.4990	-.0900	-.0130	.0880			.2480		.1890				
70.000	.0000		.4190	-.1560	-.1070	.1120			.3000		.1470	-.2280	-.2340	-.2110	-.2220
90.000	.0000	.9310	.2950	-.2280	-.1450	.1680			.3470		.0630	-.3200	-.3130	-.2700	-.1890
105.000	.0000														
110.000	.0000										-.1300	-.3920	-.4110	-.2550	-.1180
120.000	.0000		.1570	-.2440	-.1250	.4340			.3780						
135.000	.0000									-.4220					
142.000	.0000								.4460		-.3990	-.4510	-.3280	-.1480	-.0740
150.000	.0000		.0950	-.2760	-.1000	.6560		.7230							
157.000	.0000								.3150						
162.000	.0000										-.6540	-.3170	-.3210	-.1300	-.0480
165.000	.0000								.2360						
169.000	.0000						.9650								
172.000	.0000								.4770		-.6370	-.4360	-.2050	-.1490	-.0420
180.000	.0000	.6580	-.0230	-.2160	-.0820	.7830									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1000							.0370		-.0140
40.000	.1000	.1210		.2750	.2310	.1520	.0660			-.0850
70.000		-.1920	-.2680	-.3290	-.2750	-.2540	-.2310	-.2950		
90.000		-.1440	-.1900	-.1190	-.2260	-.2620	-.3190	-.2440		
105.000				-.0440	-.1210	-.2680	-.3500	-.3230		
110.000									-.2920	
120.000		-.0780	.0520	.1760	-.0380	-.3250	-.2990	-.2720	-.3080	
135.000				.2890	.1660	-.2560	-.2020	-.2010		
150.000		-.0730	.0140	.2740	.1640	-.1570	-.1950	-.2210		
165.000		-.0400		.2420	.3510	-.0400	-.1080	-.3290		
180.000		-.0260	-.0090	.2140						

AMES 11-7X7 OA12 02A ORBITER FUSELAGE (RBPB39)

MACH (2) = 1.244 ALPHA (1) = 14.980

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0575	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.0690	.2340	.2450			.2440		.2380	.2470	.2460	.2000	.1970
20.000	.0000		.6570	.0130	.1760	.2420			.2440		.2400				
40.000	.0000		.6410	.0590	.1850	.2110			.2090		.1840	.1710	.1570	.1410	.1740
55.000	.0000		.5570	-.0250	.0630	.0130			.0480		.1940				
75.000	.0000		.4340	-.1240	-.1140	.0640			.2520		.1870	-.1990	-.2160	-.2670	-.3250
90.000	.0000	.8920	.2620	-.2470	-.1210	.0650			.3380		.1140	-.3110	-.3420	-.3210	-.3650
105.000	.0000														
110.000	.0000														
120.000	.0000		.0580	-.3200	-.2460	.3850			.3960		-.1440	-.4380	-.4590	-.4240	-.1770
135.000	.0000														
142.000	.0000									-.2770					
150.000	.0000		-.0380	-.3720	-.2340	.5750			.4380		-.4300	-.4930	-.3760	-.2030	-.1550
157.000	.0000							.7640							
162.000	.0000								.2920						
165.000	.0000										-.6130	-.3140	-.3570	-.1290	-.0670
169.000	.0000								.1930						
172.000	.0000						.9410								
180.000	.0000	.5080	-.1630	-.3320	-.2040	.6640			.4240		-.6750	-.3620	-.2400	-.1310	-.0430

X/LB	.5873	.6626	.7380	.7859	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2030							.1110		.0530
40.000	.1880	.3390		.4070	.3390	.2270	.1450			-.0630
70.000		-.3870	-.4320	-.4570	-.4760	-.4290	-.3840	-.2700		
90.000		-.2220	-.3480	-.2920	-.4000	-.3760	-.3980	-.3750		
105.000				-.1500	-.2320	-.3600	-.3890	-.3990		
110.000									-.3760	
120.000		-.1070	-.1380	.1030	-.0830	-.3750	-.3330	-.3190	-.3590	
135.000				.2260	.0700	-.2610	-.2460	-.2540		
150.000		-.1620	-.1460	.3570	.0300	-.2490	-.2460	-.2540		
165.000		-.0500		.2600	.3840	-.0790	-.1490	-.3690		
180.000		-.0490	.0040	.2200						

AMES 11-7ft OA12 O2A ORBITER FUSELAGE (R8P839)

MACH (3) = 1.398 ALPHA (1) = -4.420

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3208	.3953	.5128
PHI															
.000	.0000	.0000	.0000	-.3590	-.3230	-.0280			.0150		.0830	.0530	.0130	-.0450	-.0690
25.000	.0000		.2010	-.3170	-.3010	-.0610			.0070		.0430				
40.000	.0000		.3140	-.2390	-.2080	-.2020			-.1370		-.1570	-.1480	-.0840	-.0960	-.0700
55.000	.0000		.3670	-.1750	-.1120	.0080			.1240		-.0010				
70.000	.0000		.4000	-.1430	-.0630	.1010			.2100		-.0200	-.2450	-.2900	-.0570	.0470
90.000	.0000	1.0100	.4230	-.0780	-.0190	.2100			.2230		-.0730	-.2720	-.2690	-.0930	.0390
105.000	.0000														
110.000	.0000														
125.000	.0000		.4960	.0430	.1840	.4070			.2740		-.1030	-.3140	-.2030	-.1450	.0020
135.000	.0000									-.3120					
142.000	.0000														
150.000	.0000		.5400	.1660	.3260	.7720			.5960		-.2490	-.2240	-.1430	-.0950	-.0460
157.000	.0000							.7820							
162.000	.0000								.5030						
165.000	.0000										-.4380	-.2020	.2670	-.0850	-.0630
169.000	.0000								.5150						
172.000	.0000						1.1190								
180.000	.0000	1.1170	.4850	.2700	.3820	1.0050			.7720		-.3680	-.2990	-.1070	-.0830	-.0700

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0350							-.1700		-.1740
40.000	-.0580	-.0410		-.0910	-.1160	-.1450	-.1850			-.1720
70.000		-.0300	.0320	.0540	.1490	.0470	-.0150	-.0410		
90.000		-.0040	.0820	.1580	.0770	.0320	-.0460	-.0300		
105.000				.1660	.0800	-.0020	-.0600	-.0340		
110.000									-.0970	
120.000		.0140	.1340	.3570	.0760	-.1350	-.0320	.0010	-.0710	
135.000				.7300	.4140	-.0650	-.0050	.0220		
150.000		.0280	.0590	.4110	.4810	.1150	.0760	.0460		
165.000		.0290		.4530	.5350	.2320	.1470	-.1290		
180.000		.0300	.0330	.4140						

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBFB39)

MACH (3) = 1.395 ALPHA (2) = -3.42D

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0642	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.3450	-.3080	-.0270			.0670		.0770	.0570	.0180	-.0480	-.0660
20.000	.0000		.2250	-.3010	-.2850	-.0510			-.0030		.0400				
40.000	.0000		.3360	-.2250	-.1920	-.1630			-.1060		-.1360	-.1370	-.0730	-.0840	-.0530
55.000	.0000		.3810	-.1650	-.1050	.0230			.1270		.0120				
70.000	.0000		.4060	-.1360	-.0620	.0940			.2080		-.0170	-.2380	-.2800	-.0750	.0590
90.000	.0000	1.0690	.4180	-.0800	-.0280	.1980			.2250		-.0630	-.2710	-.2680	-.1990	.0250
105.000	.0000														
110.000	.0000														
125.000	.0000		.4700	.0280	.1570	.4080			.2750		-.1070	-.3170	-.2150	-.1490	-.0140
135.000	.0000									-.3310					
142.000	.0000										-.2540	-.2370	-.1560	-.1150	-.1490
150.000	.0000		.5130	.1340	.2950	.7600			.5820						
157.000	.0000							.7740							
162.000	.0000								.4860						
165.000	.0000										-.4490	-.2130	.1180	-.0950	-.1640
169.000	.0000								.4920						
172.000	.0000						1.1070								
180.000	.0000	1.0870	.4530	.2350	.3480	.9900			.7500		-.3820	-.3120	-.1210	-.0940	-.0760

X/LB	.5873	.6626	.7380	.7869	.8283	.8846	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0350							-.1570		-.1580
20.000	-.0490	-.0320		-.0770	-.0980	-.1320	-.1730			-.1590
70.000		-.0420	.0090	.0290	.1220	.0260	-.0400	-.0610		
90.000		-.0120	.0580	.1360	.0560	.0120	-.0640	-.0500		
105.000				.1590	.0670	-.0210	-.0790	-.0610		
110.000									-.0960	
125.000		.0680	.1140	.3490	.0770	-.1510	-.0560	-.0170	-.0800	
135.000				.6920	.4010	-.0830	-.0180	.0070		
150.000		.0210	.0630	.3880	.4550	.0980	.0580	.0310		
165.000		.0230		.4270	.5040	.2120	.1280	-.1400		
180.000		.0220	.0240	.3940						

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBF039)

MACH (3) = 1.398 ALPHA (3) = -1.430

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.3180	-.2730	-.0160			.0390		.0920	.0850	.0430	-.0180	-.0530
20.000	.0000		.2770	-.2690	-.2490	-.0260			.0290		.0710				
40.000	.0000		.3810	-.1940	-.1610	-.0940			-.0220		-.0390	-.0760	-.0410	-.0550	-.0320
55.000	.0000		.4130	-.1450	-.0870	.0480			.1790		.0620				
70.000	.0000		.4210	-.1300	-.0620	.0940			.2450		.0420	-.2180	-.2440	-.0870	.0220
90.000	.0000	1.0140	.4140	-.0880	-.0350	.1360			.2730		-.0300	-.2510	-.2480	-.1050	.0110
105.000	.0000														
110.000	.0000														
120.000	.0000		.4340	.0000	.1170	.3990			.3250		-.0950	-.3030	-.2280	-.1490	-.0150
135.000	.0000														
142.000	.0000									-.3020					
150.000	.0000		.4600	.0710	.2380	.7420			.5720		-.2510	-.2480	-.1780	-.1120	-.0460
157.000	.0000							.7870							
162.000	.0000								.4780						
165.000	.0000										-.4510	-.2210	.0690	-.1010	-.0590
169.000	.0000								.4710						
172.000	.0000						1.0930								
180.000	.0000	1.0400	.3930	.1690	.2840	.9680			.7190		-.3940	-.3270	-.1560	-.1070	-.0730

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0270							-.1160		-.1240
40.000	-.0230	-.0140		-.0460	-.0660	-.0930	-.1340			-.1410
70.000		-.0600	-.0340	-.0180	.0650	-.0110	-.0700	-.0930		
90.000		-.0270	.0090	.0970	.0490	-.0130	-.0910	-.0930		
105.000				.1390	.0410	-.0520	-.1090	-.1020		
110.000									-.1380	
120.000		-.0030	.0820	.3450	.0740	-.1720	-.0940	-.0480	-.1110	
125.000				.6270	.3700	-.1050	-.0340	-.0140		
150.000		.0120	.0730	.3410	.4060	.0670	.0370	.0050		
165.000		.0140		.3810	.4500	.1810	.0960	-.1600		
180.000		.0150	.0140	.3490						

AMES 11-7U7 OA12 OEA ORBITER FUSELAGE (RBPB39)

MACH (3) = 1.397 ALPHA (4) = .52U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.2830	-.2300	.0130			.0460		.0740	.0910	.0610	.0020	-.0340
20.000	.0000		.3300	-.2290	-.2080	.0040			.0380		.0710				
40.000	.0050		.4230	-.1550	-.1230	-.0270			.0070		.0120	-.0260	-.0150	-.0300	-.0120
55.000	.0000		.4430	-.1200	-.0630	.0690			.1830		.1130				
70.000	.0000		.4390	-.1180	-.0570	.0990			.2540		.0680	-.1980	-.2290	-.1060	-.0030
90.000	.0000	1.0200	.4130	-.0920	-.0410	.1130			.2950		-.0690	-.2490	-.2490	-.1170	-.0130
105.000	.0000														
110.000	.0000														
120.000	.0000		.4020	-.0220	.0810	.0780			.3400		-.0940	-.3040	-.2410	-.1530	-.0250
135.000	.0000														
142.000	.0000									-.3260					
150.000	.0000		.4110	.0210	.1880	.7160			.5570		-.2620	-.2760	-.1830	-.1210	-.0450
157.000	.0000							.7570							
162.000	.0000								.4540						
165.000	.0000										-.4710	-.2380	-.0650	-.1120	-.0550
169.000	.0000								.4340						
172.000	.0000						1.0780								
180.000	.0000	.9870	.3390	.1120	.2240	.9360			.6830		-.4150	-.3530	-.1410	-.1140	-.0650

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0150							-.0820		-.0900
40.000	-.0690	.0050		-.0100	-.0330	-.0540	-.0970			-.1220
70.000		-.0770	-.0800	-.0700	.0110	-.0400	-.0870	-.1290		
90.000		-.0460	-.0280	.0700	-.0280	-.0580	-.1200	-.1300		
105.000				.1130	.0200	-.0800	-.1410	-.1430		
110.000									-.1680	
120.000		-.0170	.0410	.3370	.0720	-.1880	-.1320	-.0880	-.1350	
135.000				.5770	.3400	-.1340	-.0530	-.0400		
150.000		.0030	.0750	.3030	.3540	.0320	.0070	-.0210		
165.000		.0630		.3370	.4090	.1490	.0680	-.1790		
180.000		.0030	.0080	.3130						

AMES 11-7X7 OA12 OPA ORBITER FUSELAGE (RBPB39)

MACH (3) = 1.396 ALPHA (5) = 2.600

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.2510	-.1830	.0350			.0620		.0770	.1060	.0840	.0210	-.0140
25.000	.0000		.3900	-.1910	-.1670	.0270			.0590		.0840				
40.000	.0000		.4650	-.1190	-.0850	.0170			.0490		.0670	.0260	.0130	-.0090	.0050
55.000	.0000		.4740	-.0980	-.0430	.0830			.1720		.1480				
70.000	.0000		.4540	-.1100	-.0590	.1030			.2620		.1020	-.1860	-.2150	-.1260	-.0370
90.000	.0000	1.0200	.4070	-.1030	-.0500	.1120			.3080		.0190	-.2410	-.2450	-.1400	-.0390
105.000	.0000														
110.000	.0000														
120.000	.0000		.3700	-.0490	.0420	.3370			.3530		-.0930	-.2970	-.2480	-.1550	-.0420
135.000	.0000														
142.000	.0000									-.3270					
150.000	.0000		.3580	-.0280	.1320	.6830			.5440		-.2720	-.3010	-.2000	-.1310	-.0500
157.000	.0000							.7530							
162.000	.0000								.4370						
165.000	.0000										-.4850	-.2510	-.1490	-.1200	-.0550
169.000	.0000								.4080						
172.000	.0000						1.0570								
180.000	.0000	.9370	.2780	.0550	.1640	.8880			.6520		-.4330	-.3750	-.1460	-.1210	-.0540

X/LB	.5873	.6626	.7369	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0000							-.0440		-.0550
40.000	.0060	.0210		.0240	.0040	-.0160	-.0590			-.0990
70.000		-.0970	-.1150	-.1310	-.0540	-.0700	-.1190	-.1630		
90.000		-.0670	-.0620	.0400	-.0680	-.0950	-.1490	-.1650		
105.000				.0760	.0000	-.1110	-.1840	-.1770		
110.000									-.1910	
120.000		-.0320	.0220	.2650	.0600	-.1980	-.1650	-.1270	-.1550	
135.000				.5320	.3060	-.1600	-.0780	-.0620		
150.000		-.0070	.0530	.2740	.3050	-.0030	-.0200	-.0510		
165.000		-.0040		.3020	.3670	.1180	.0360	-.2010		
180.000		-.0020	-.0030	.2740						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBFB39)

MACH (3) = 1.397 ALPHA (6) = 4.57U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.UUUU	.UU75	.U188	.U339	.U6U2	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.32U6	.3953	.5125
PHI															
.UUU	.UUUU	.UUUU	.UUUU	-.217U	-.137U	.U66U			.U75U		.U9UU	.116U	.1U2U	.U42U	.UU6U
2U.UUU	.UUUU		.446U	-.153U	-.124U	.U56U			.U77U		.U95U				
4U.UUU	.UUUU		.5U2U	-.U83U	-.U53U	.U55U			.U9UU		.1U7U	.U68U	.U4UU	.U15U	.UU6U
55.UUU	.UUUU		.498U	-.U76U	-.U26U	.U86U			.1311		.172U				
7U.UUU	.UUUU		.46UU	-.1U2U	-.U6UU	.1UUU			.259U		.13UU	-.178U	-.2U4U	-.14UU	-.U74U
9U.UUU	.UUUU	1.U16U	.396U	-.112U	-.U58U	.1U9U			.323U		.U44U	-.235U	-.244U	-.159U	-.U75U
1U5.UUU	.UUUU														
11U.UUU	.UUUU														
12U.UUU	.UUUU		.332U	-.U77U	.U67U	.274U			.344U		-.U89U	-.29UU	-.262U	-.164U	-.U63U
135.UUU	.UUUU														
142.UUU	.UUUU									-.328U					
15U.UUU	.UUUU		.311U	-.U72U	.U8UU	.645U			.531U		-.281U	-.325U	-.216U	-.14UU	-.U53U
157.UUU	.UUUU							.755U							
162.UUU	.UUUU								.42UU						
165.UUU	.UUUU										-.497U	-.26UU	-.19UU	-.127U	-.U53U
169.UUU	.UUUU								.382U						
172.UUU	.UUUU						1.U36U								
18U.UUU	.UUUU	.882U	.219U	.U62U	.1U7U	.822U			.618U		-.449U	-.395U	-.155U	-.128U	-.U52U

X/LB	.5873	.6626	.738U	.7869	.8283	.8848	.9262	.9639	1.UU15	1.U392
PHI										
.UUU	.U19U							-.U69U		-.U25U
4U.UUU	.U22U	.U38U		.U61U	.U42U	.U22U	-.U22U			-.U79U
7U.UUU		-.117U	-.145U	-.186U	-.1U5U	-.1U2U	-.149U	-.193U		
9U.UUU		-.U83U	-.U87U	-.U62U	-.U94U	-.13UU	-.177U	-.198U		
1U5.UUU				.U49U	-.U16U	-.137U	-.22UU	-.2U6U		
11U.UUU									-.221U	
12U.UUU		-.U45U	.U54U	.266U	.U5UU	-.217U	-.189U	-.163U	-.184U	
135.UUU				.394U	.273U	-.174U	-.1U2U	-.U85U		
15U.UUU		-.U2UU	.U48U	.259U	.259U	-.U28U	-.U46U	-.U81U		
165.UUU		-.U17U		.269U	.3U6U	.U85U	.U44U	-.219U		
18U.UUU		-.U12U	-.U12U	.228U						

AMES 11-7X7 OA12 O2A ORBITER FUSELAGE (RBPB39)

MACH (3) = 1.399 ALPHA (7) = 6.440

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.1760	-.0860	.0910			.0950		.1050	.1250	.1280	.0720	.0390
25.000	.0000		.5030	-.1125	-.0745	.0860			.0970		.1010				
40.000	.0000		.5430	-.0440	-.0130	.0920			.1120		.1340	.1060	.0700	.0350	.0520
55.000	.0000		.5250	-.0490	-.0060	.0860			.1110		.1920				
70.000	.0000		.4740	-.0880	-.0560	.1040			.2430		.1550	-.1630	-.1860	-.1440	-.1070
90.000	.0000	1.0140	.3910	-.1190	-.0600	.1110			.3330		.0740	-.2290	-.2460	-.1750	-.1080
105.000	.0000														
110.000	.0000														
120.000	.0000		.3020	-.0990	-.0190	.2100			.3140		-.0800	-.2810	-.2770	-.1770	-.0770
135.000	.0000														
142.000	.0000									-.3250					
150.000	.0000		.2640	-.1080	.0330	.6030			.5270		-.2840	-.3370	-.2280	-.1430	-.0570
157.000	.0000							.7630							
162.000	.0000								.4120						
165.000	.0000										-.5010	-.2590	-.2010	-.1250	-.0520
169.000	.0000								.3630						
172.000	.0000						1.0040								
180.000	.0000	.8330	.1640	-.0450	.0580	.7550			.5960		-.4600	-.4040	-.1560	-.1270	-.0510

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0490							.0350		.0120
40.000	.0530	.0600		.1050	.0860	.0680	.0190			-.0510
70.000		-.1280	-.1720	-.2310	-.1410	-.1450	-.1720	-.2030		
90.000		-.1020	-.1130	-.0330	-.1110	-.1570	-.2260	-.2260		
105.000				.0340	-.0310	-.1600	-.2480	-.2470		
110.000									-.2360	
120.000		-.0540	.0490	.2640	.0470	-.2320	-.2100	-.1820	-.2120	
135.000				.3370	.2320	-.1920	-.1130	-.1000		
150.000		-.0310	.0530	.2280	.2160	-.0360	-.0640	-.1040		
165.000		-.0220		.2470	.2540	.0650	-.0120	-.2180		
180.000		-.0170	-.0170	.1880						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBFB39)

MACH (3) = 1.398 ALPHA (8) = 8.710

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.1280	-.0190	.1310			.1270		.1310	.1400	.1520	.1070	.0770
25.000	.0000		.5650	-.0590	-.0100	.1260			.1310		.1250				
40.000	.0000		.5900	.0070	.0360	.1280			.1400		.1510	.1430	.1050	.0690	.0850
55.000	.0000		.5530	-.0180	.0170	.0820			.1060		.2060				
70.000	.0000		.4860	-.0730	-.0610	.0970			.1940		.1790	-.1460	-.1720	-.1590	-.1530
90.000	.0000	1.0040	.3830	-.1260	-.0650	.1040			.3370		.1040	-.2170	-.2410	-.1970	-.1600
105.000	.0000														
110.000	.0000														
125.000	.0000		.2620	-.1310	-.0520	.1730			.2930		-.0580	-.2760	-.3080	-.2110	-.1020
135.000	.0000														
142.000	.0000									-.3150					
150.000	.0000		.2090	-.1490	-.0190	.5645			.5190		-.2880	-.3510	-.2480	-.1430	-.0680
157.000	.0000							.7760							
162.000	.0000								.4020						
165.000	.0000										-.5040	-.2600	-.2170	-.1290	-.0550
169.000	.0000								.3430						
172.000	.0000						.9750								
180.000	.0000	.7710	.1010	-.0940	.0030	.6860			.5700		-.4710	-.4080	-.1600	-.1340	-.0500

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0880							.0800		.0480
40.000	.0910	.0900		.1560	.1390	.1200	.0630			-.0300
70.000		-.1650	-.2030	-.2720	-.2440	-.1950	-.2120	-.2260		
90.000		-.1280	-.1450	-.0770	-.1460	-.1920	-.2540	-.2700		
105.000				-.0070	-.0590	-.1920	-.2690	-.2900		
110.000									-.2740	
125.000		-.0740	.0450	.2200	.0270	-.2440	-.2380	-.2060	-.2360	
135.000				.2640	.1980	-.2060	-.1340	-.1210		
150.000		-.0550	.0230	.2040	.1940	-.0530	-.0960	-.1250		
165.000		-.0340		.1990	.2800	.0440	-.0280	-.2320		
180.000		-.0270	-.0280	.1520						

AMES 11-7D7 OA12 02A ORBITER FUSELAGE (RBPB39)

MACH (3) = 1.397 ALPHA (9) = 10.110

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.0990	.0190	.1540			.1460		.1500	.1430	.1590	.1280	.1000
25.000	.0000		.6020	-.0280	.0280	.1490			.1520		.1440				
40.000	.0000		.6180	.0340	.0680	.1540			.1570		.1320	.1500	.1140	.0840	.1190
55.000	.0000		.5730	-.0010	.0340	.0700			.0930		.2090				
75.000	.0000		.4870	-.0670	-.0640	.0880			.1650		.1900	-.1450	-.1700	-.1710	-.1730
90.000	.0000	.9980	.3720	-.1320	-.0710	.0980			.3280		.1110	-.2210	-.2500	-.2070	-.1960
105.000	.0000														
110.000	.0000														
120.000	.0000		.2360	-.1490	-.0690	.1630			.2950		-.0590	-.2910	-.3230	-.2450	-.1250
135.000	.0000									-.3120					
142.000	.0000														
150.000	.0000		.1700	-.1750	-.0460	.5430			.5130		-.3050	-.3690	-.2610	-.1470	-.0860
157.000	.0000							.7860							
162.000	.0000								.3940						
165.000	.0000										-.5180	-.2660	-.2330	-.1280	-.0590
169.000	.0000								.3270						
172.000	.0000						.9400								
180.000	.0000	.7290	.0620	-.1260	-.0340	.6490			.5530		-.4910	-.4170	-.1660	-.1350	-.0510

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.1110							.1060		.0690
40.000	.1110	.1140		.1850	.1790	.1530	.0970			-.0260
75.000		-.2290	-.2490	-.2960	-.2500	-.2420	-.2530	-.2120		
90.000		-.1370	-.1630	-.1160	-.1690	-.2090	-.2770	-.2960		
105.000				-.0350	-.0790	-.2080	-.2870	-.3080		
110.000									-.2830	
120.000		-.0850	.0290	.1870	.0180	-.2510	-.2500	-.2220	-.2540	
135.000				.2390	.1780	-.2070	-.1410	-.1380		
150.000		-.0740	-.0270	.2110	.1690	-.1870	-.1290	-.1510		
165.000		-.0415		.1810	.3460	.0230	-.0450	-.2450		
180.000		-.0320	-.0370	.1510						

AMES 11-7U7 OA12 OEA ORBITER FUSELAGE (RBPB39)

MACH (3) = 1.394 ALPHA (15) = 15.030

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PHI															
.000	.0000	.0000	.0460	.0230	.1860	.2520			.2340		.2330	.2190	.1970	.2130	.2020
25.000	.0000		.7340	.1010	.1890	.2430			.2440		.2240				
40.000	.0000		.7120	.1410	.1910	.2120			.2030		.1100	.1470	.1760	.1570	.1960
55.000	.0000		.6310	.0580	.0880	.0220			.0430		.1280				
70.000	.0000		.5050	-.0430	-.0700	.0670			.0780		.1940	-.1030	-.1410	-.2010	-.2480
90.000	.0000	.9390	.3440	-.1540	-.0820	.0610			.2370		.1550	-.1990	-.2480	-.2580	-.2700
105.000	.0000														
110.000	.0000														
120.000	.0000		.1400	-.2200	-.1320	.0790			.3600		-.0650	-.3230	-.3630	-.3730	-.1800
135.000	.0000														
142.000	.0000									-.1900					
150.000	.0000		.0450	-.2640	-.1490	.4770			.5040		-.3330	-.3800	-.3030	-.1880	-.1560
157.000	.0000							.7680							
162.000	.0000								.3690						
165.000	.0000										-.5080	-.2560	-.2610	-.1270	-.0660
169.000	.0000								.2810						
172.000	.0000						.8950								
180.000	.0000	.5950	-.0670	-.2360	-.1430	.5410			.4940		-.5160	-.3600	-.1850	-.1280	-.0540

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.2130							.1900		.1410
40.000	.2060	.2150		.3340	.3440	.2840	.2140			.0150
70.000		-.4040	-.4420	-.4660	-.4350	-.4510	-.4220	-.3440		
90.000		-.1980	-.2990	-.2860	-.3570	-.3270	-.3390	-.3490		
105.000				-.1380	-.2080	-.2890	-.3350	-.3560		
110.000									-.3350	
120.000		-.1210	-.1280	.0920	-.0360	-.2880	-.2930	-.2650	-.2930	
135.000				.1570	.0740	-.2150	-.1850	-.1940		
150.000		-.1770	-.1820	.2760	.0030	-.2140	-.1930	-.1970		
165.000		-.0490		.1860	.3980	-.0140	-.0870	-.2870		
180.000		-.0390	-.0400	.0220						

AMES 11-7ft OA12 OBA ORBITER FUSELAGE (RBPB40) (01 MAY 73)

REFERENCE DATA

SREF = 2.421 SQ.FT. XMRP = 28.530 INCHES
LREF = 39.849 INCHES YMRP = .000 INCHES
BREF = 39.849 INCHES ZMRP = .000 INCHES
SCALE = .03 SCALE

PARAMETRIC DATA

ALPHA = .50 RUDDER = .00
ELEVON = .00 RUDFLP = .00

MACH (1) = 1.09 BETA (1) = -8.00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.00	.0000	.0000	.0000	-.570	-.386	.180			.135		.056	.000	-.061	-.108	-.087
25.00	.0000		.180	-.454	-.240	.137			.096		.026				
40.00	.0000		.366	-.285	-.049	-.093			-.098		-.149	-.179	-.148	-.124	-.059
55.00	.0000		.444	-.126	.187	.226			.234		.157				
70.00	.0000		.506	-.056	.251	.322			.278		.155	-.297	-.193	-.017	.025
90.00	.0000	1.069	.492	.012	.319	.372			.303		.131	-.379	-.287	-.144	-.0
105.00	.0000														
115.00	.0000														
125.00	.0000		.451	.144	.383	.507			.403		.057	-.435	-.268	-.116	-.017
135.00	.0000														
142.00	.0000									-.250					
150.00	.0000		.365	.167	.373	.727			.481		-.314	-.284	-.283	-.165	-.011
157.00	.0000							.754							
162.00	.0000								.383						
165.00	.0000										-.431	-.239	-.331	-.126	.011
169.00	.0000								.225						
172.00	.0000						.920								
180.00	.0000	.840	.155	.108	.274	.773			.496		-.781	-.405	-.452	-.371	-.133

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.00	.042							-.224		-.128
40.00	-.073	.001		.008	-.059	-.170	-.244			-.127
75.00		.046	-.111	.068	.185	-.025	-.139	-.125		
90.00		.070	-.061	.154	.122	-.049	-.147	-.134		
105.00				.246	.068	-.072	-.173	-.136		
115.00									-.270	
125.00		.042	.112	.538	.022	-.152	-.092	-.046	-.168	
135.00				.475	.184	-.237	.044	.028		
150.00		.033	.213	.277	.068	.011	.119	.017		
165.00		.058		.347	.306	.103	.146	-.222		
180.00		-.066	.109	.230						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 02A ORBITER FUSELAGE (RBFB40)

MACH (1) = 1.101 BETA (2) = -4.000

SECTION : 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.5780	-.4020	.2480			.1560		.0570	-.0060	-.0530	-.1080	-.0640
20.000	.0000		.1610	-.4790	-.3830	.1740			.1320		.0360				
40.000	.0000		.2980	-.3530	-.1930	.0710			.1250		-.0720	-.1080	-.1150	-.1110	-.0520
55.000	.0000		.3570	-.2640	.1990	.2360			.1960		.0680				
70.000	.0000		.3740	-.2330	.2130	.2880			.2250		.0310	-.3370	-.2690	-.0810	-.0010
90.000	.0000	.9720	.3510	-.2030	.2460	.3190			.2360		-.0240	-.4160	-.3560	-.0960	-.0230
105.000	.0000														
110.000	.0000														
125.000	.0000		.3320	-.0960	.3040	.4470			.2920		-.1150	-.4740	-.3140	-.1400	-.0260
135.000	.0000									-.4850					
142.000	.0000								.4390		-.3930	-.3120	-.3030	-.1340	-.0070
150.000	.0000		.2940	.0070	.3450	.7020		.7010							
157.000	.0000								.3330						
162.000	.0000										-.6790	-.2890	-.3120	-.1200	.0000
165.000	.0000								.2410						
169.000	.0000						.9430								
172.000	.0000								.5210		-.7490	-.4510	-.2760	-.1740	-.0190
180.000	.0000	.6340	.1450	.0430	.3090	.8200									

X/LB	.5873	.6626	.7380	.7869	.8293	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0050							-.2080		-.1670
40.000	-.0180	.0780		.0040	-.0270	-.1150	-.2030			-.1490
70.000		.0290	-.1000	.0430	.1410	-.0760	-.1730	-.1740		
90.000		.0610	-.0020	.1320	.0540	-.0950	-.1880	-.1730		
105.000				.1930	-.0040	-.1140	-.2050	-.1690		
110.000									-.3040	
125.000		.0710	.2150	.4320	-.0530	-.1890	-.1240	-.1080	-.2020	
135.000				.5820	.2210	-.2170	-.0330	-.0320		
150.000		.0770	.2680	.3530	.1990	-.0690	.0250	-.0570		
165.000		.0840		.3820	.3380	.0380	.0290	-.2780		
180.000		.0350	.2170	.3230						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7D7 OA12 O2A ORBITER FUSELAGE (RBPB40)

MACH (1) = 1.100 BETA (3) = -1.960

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.5850	-.3980	.2140			.1560		.0590	-.0690	-.0500	-.1040	-.0570
20.000	.0000		.1430	-.4950	-.4000	.1910			.1420		.0380				
40.000	.0000		.2560	-.3850	-.2520	.1210			.0710		-.0410	-.0880	-.1020	-.1160	-.0360
55.000	.0000		.3040	-.3190	-.1120	.2350			.1850		.0410				
75.000	.0000		.3100	-.3060	.1550	.2670			.2030		-.0120	-.3650	-.2960	-.1170	-.0060
90.000	.0000	.9180	.2810	-.2720	.2380	.2940			.2050		-.0770	-.4350	-.3800	-.1160	-.0250
105.000	.0000														
110.000	.0000														
120.000	.0000		.2760	-.1870	.2680	.4080			.2310		-.1800	-.4970	-.3340	-.0970	-.0040
135.000	.0000														
142.000	.0000									-.5970					
150.000	.0000		.2650	-.0470	.3310	.6770			.4110		-.4310	-.3520	-.3050	-.1210	.0070
157.000	.0000							.6570							
162.000	.0000								.2990						
165.000	.0000										-.7630	-.3210	-.3080	-.1330	.0230
169.000	.0000								.2430						
172.000	.0000						.9410								
180.000	.0000	.8320	.1520	.0240	.3280	.8340			.5250		-.7430	-.4840	-.2450	-.1670	.0270
X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	.0150							-.2070		-.1810					
40.000	.0130	.0790		.0270	-.0090	-.0970	-.1930			-.1610					
75.000		.0190	-.0940	.0340	.1000	-.1010	-.2030	-.1870							
90.000		.0460	.0260	.1070	.0130	-.1210	-.2170	-.1740							
105.000				.1400	-.0300	-.1380	-.2250	-.1850							
110.000									-.3120						
120.000		.0580	.2410	.3450	-.0940	-.2150	-.1560	-.1320	-.2280						
135.000				.6020	.2320	-.2400	-.0910	-.0710							
150.000		.0610	.2680	.3930	.2480	-.1010	-.0530	-.1090							
165.000		.0620		.3940	.3530	.0010	-.0340	-.3150							
180.000		.0500	.2580	.3520											

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBTB4U)

MACH (1) = 1.099 BETA (4) = .0U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.5890	-.4080	.2180			.1600		.0610	-.0120	-.0500	-.1030	-.0470
20.000	.0000		.1270	-.5090	-.4140	.2060			.1540		.0410				
40.000	.0000		.2170	-.4140	-.2930	.1550			.0980		-.0270	-.0750	-.1050	-.1250	-.0290
55.000	.0000		.2500	-.3690	-.1840	.2330			.1720		.0200				
70.000	.0000		.2490	-.3630	-.0960	.2610			.1790		-.0460	-.3890	-.3280	-.1310	-.0050
90.000	.0000	.8660	.2210	-.3260	.1930	.2670			.1730		-.1170	-.4580	-.4030	-.1630	-.0160
105.000	.0000														
110.000	.0000														
120.000	.0000		.2260	-.2380	.2120	.3690			.1770		-.2300	-.5210	-.3470	-.0910	.0240
135.000	.0000														
142.000	.0000									-.6430					
150.000	.0000		.2360	-.0890	.2970	.6470			.3790		-.4750	-.3830	-.2720	-.1220	.0310
157.000	.0000							.6120							
162.000	.0000								.2580						
165.000	.0000										-.8020	-.3490	-.2890	-.1350	.0180
169.000	.0000								.2410						
172.000	.0000						.9290								
180.000	.0000	.8300	.1510	.0260	.3330	.8360			.5310		-.7390	-.5340	-.2050	-.1550	.0150

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0220							-.2010		-.1900
40.000	.0280	.0960		.0250	.0050	-.0840	-.1810			-.1900
70.000		.0070	-.0630	.0310	.0840	-.1220	-.2200	-.2180		
90.000		.0430	.0600	.0910	.0000	-.1410	-.2270	-.2040		
105.000				.1170	-.0480	-.1530	-.2290	-.2090		
110.000									-.3270	
120.000		.0610	.2350	.2850	-.1330	-.2360	-.1810	-.1710	-.2590	
135.000				.6460	.2270	-.2660	-.1350	-.1250		
150.000		.0630	.3010	.4110	.2910	-.1230	-.1220	-.1540		
165.000		.0550		.4240	.3640	-.0210	-.0850	-.3470		
180.000		.0490	.2690	.3660						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 OBA ORBITER FUSELAGE (RBPB4U)

MACH (1) = 1.099 BETA (5) = 2.15U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1906	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.5910	-.4300	.2130			.1590		.0660	-.0070	-.0510	-.1040	-.0520
20.000	.0000		.1090	-.5250	-.4210	.2120			.1610		.0470				
40.000	.0000		.1790	-.4450	-.3330	.1870			.1270		-.0150	-.0730	-.1070	-.1390	-.0210
55.000	.0000		.1970	-.4160	-.2580	.2240			.1650		-.0020				
70.000	.0000		.1890	-.4190	-.2520	.2420			.1630		-.0820	-.4170	-.3590	-.1370	-.0650
90.000	.0000	.8080	.1610	-.3850	-.1910	.2460			.1480		-.1570	-.4810	-.4360	-.0990	-.0110
105.000	.0000														
110.000	.0000														
120.000	.0000		.1750	-.2880	.1260	.3310			.1190		-.2830	-.5530	-.3640	-.0950	.0170
135.000	.0000									-.6790					
142.000	.0000								.3420		-.5240	-.4310	-.2280	-.1390	.0290
150.000	.0000		.2070	-.1040	.2550	.6100		.5500							
157.000	.0000								.2110						
162.000	.0000										-.8230	-.3880	-.2560	-.1450	.0190
165.000	.0000								.2330						
169.000	.0000						.9090								
172.000	.0000								.5220		-.7360	-.5060	-.2210	-.1580	.0070
180.000	.0000	.8350	.1540	.0420	.3300	.8310									

X/LB	.5073	.6626	.7380	.7869	.8263	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0140							-.2090		-.1790
40.000	.0350	.1270		.0320	-.0020	-.0800	-.1890			-.2150
70.000		.0150	-.0220	.0160	.0420	-.1640	-.2590	-.2540		
90.000		.0530	.0930	.0760	-.0360	-.1750	-.2650	-.2440		
105.000				.0840	-.0960	-.1910	-.2710	-.2510		
110.000									-.3590	
120.000		.0730	.2560	.2370	-.1790	-.2850	-.2220	-.2240	-.2950	
135.000				.6580	.2100	-.3180	-.2170	-.1960		
150.000		.0730	.3020	.4620	.3130	-.1560	-.2030	-.2150		
165.000		.0710		.4420	.3570	-.0690	-.1470	-.3920		
180.000		.0560	.2570	.3560						

DATE 17 SEP 75 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 02A ORBITER FUSELAGE (RBPB4U)

MACH (1) = 1.100 BETA (6) = 4.230

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.32 U	.3953	.5127
PHI															
.000	.0000	.0000	.0000	-.5890	-.4390	.2110			.1550		.0640	-.0030	-.0560	-.1070	-.1640
20.000	.0000		.0900	-.5350	-.4290	.2100			.1620		.0520				
40.000	.0000		.1430	-.4690	-.3640	.2080			.1430		-.0080	-.0750	-.1210	-.1580	-.1250
55.000	.0000		.1450	-.4590	-.3170	.2270			.1560		-.0170				
70.000	.0000		.1300	-.4660	-.3310	.2360			.1500		-.1080	-.4380	-.3870	-.1330	-.0120
90.000	.0000	.7550	.1010	-.4320	-.2880	.2250			.1240		-.1890	-.5030	-.4490	-.0970	.0120
105.000	.0000														
110.000	.0000														
120.000	.0000		.1210	-.3340	.0450	.2870			.0650		-.3300	-.5780	-.3670	-.1160	.0170
135.000	.0000									-.7130					
142.000	.0000								.3000		-.5780	-.4550	-.2160	-.1520	.0100
150.000	.0000		.1750	-.1340	.2080	.5670		.4880							
157.000	.0000								.1640						
162.000	.0000										-.8390	-.4430	-.2270	-.1620	-.0670
165.000	.0000								.2220						
169.000	.0000						.8780								
172.000	.0000								.5080		-.7310	-.4410	-.2540	-.1680	-.0700
180.000	.0000	.8310	.1520	.0680	.3180	.8170									
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	.0000							-.2170		-.1750					
40.000	.0760	.1360		.0270	-.0020	-.0870	-.1880			-.2370					
70.000		.0690	-.0240	.0030	.0190	-.1890	-.2770	-.2830							
90.000		.0480	.0790	.0510	-.0580	-.1980	-.2870	-.2740							
105.000				.0550	-.1370	-.2160	-.2930	-.2820							
110.000									-.3630						
120.000		.0760	.2440	.1810	-.2380	-.3220	-.2500	-.2540	-.3220						
135.000				.6610	.1860	-.3700	-.3070	-.2570							
150.000		.0870	.2810	.4960	.3180	-.1710	-.2580	-.2750							
165.000		.0720		.4470	.3730	-.1200	-.1930	-.4160							
180.000		.0410	.2260	.3220											

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB40)

MACH (1) = 1.099 BETA (7) = 8.390

SECTION (1)ORBITER FUSELAGE DEFENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.5880	-.4060	.1930			.1380		.0600	-.0020	-.0640	-.1110	-.0840
20.000	.0000		.0490	-.5610	-.4460	.2040			.1580		.0540				
40.000	.0000		.0610	-.5200	-.4190	.2200			.1570		-.0120	-.0990	-.1590	-.1860	-.0180
55.000	.0000		.0380	-.5420	-.4190	.2170			.1400		-.0430				
70.000	.0000		-.0420	-.5590	-.4870	.2160			.1180		-.1520	-.4750	-.4280	-.0910	.0380
90.000	.0000	.6320	-.0230	-.5260	-.4100	.1850			.0770		-.2510	-.5400	-.4710	-.0860	.0310
105.000	.0000														
110.000	.0000														
120.000	.0000		.0240	-.4050	-.0890	.1840			-.0480		-.4100	-.6250	-.3160	-.0990	.0340
135.000	.0000									-.7800					
142.000	.0000										-.7200	-.5050	-.2370	-.1640	.0110
150.000	.0000		.1140	-.1320	.0940	.4540			.1890						
157.000	.0000							.3430							
162.000	.0000								.0700						
165.000	.0000										-.8580	-.4990	-.2360	-.2320	-.0260
169.000	.0000								.1890						
172.000	.0000						.7880								
180.000	.0000	.8250	.1500	.1020	.2710	.7580			.4730		-.7250	-.4310	-.4380	-.2750	-.1340

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0075							-.2250		-.1340
40.000	.0250	.1170		.0240	-.0050	-.0840	-.1890			-.2480
70.000		-.0120	-.0250	-.0150	-.0110	-.2360	-.3220	-.3410		
90.000		.0290	.0610	.0260	-.1010	-.2460	-.3400	-.3290		
105.000				.0160	-.2170	-.2750	-.3450	-.3350		
110.000									-.3890	
120.000		.0430	.2060	.0970	-.3240	-.4360	-.3160	-.3410	-.3730	
135.000				.6810	.1690	-.4610	-.4640	-.3880		
150.000		.0080	.1920	.3580	.2010	-.2070	-.3280	-.3650		
165.000		-.0550		.3840	.3560	-.1950	-.2850	-.4500		
180.000		-.0570	.1110	.2400						

AMES 11-7U7 OA12 02A ORBITER FUSELAGE (RBPB40)

MACH (2) = 1.250 BETA (1) = -8.040

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.3990	-.2830	.0010			.0590		.1040	.0630	.0180	-.0500	-.0720
20.000	.0000		.3030	-.2940	-.2510	-.0280			.0110		.0380				
40.000	.0000		.4760	-.1490	-.0580	-.1400			-.1820		-.1880	-.2050	-.0950	-.0710	-.0350
55.000	.0000		.5640	-.0260	.1170	.2430			.2550		.1520				
70.000	.0000		.5960	.0190	.1710	.3430			.3330		.1400	-.1780	-.1530	-.0650	.0310
90.000	.0000	1.1490	.5770	.0410	.2180	.4110			.3780		.1070	-.2360	-.2130	-.0240	-.0640
105.000	.0000														
110.000	.0000														
120.000	.0000		.5270	.0750	.3240	.5610			.4960		.0370	-.2870	-.2140	-.1070	-.0510
135.000	.0000														
142.000	.0000									-.1420					
150.000	.0000		.4480	.0450	.3260	.7930			.5960		-.2210	-.2060	-.2110	-.1670	-.0560
157.000	.0000							.8530							
162.000	.0000								.4980						
165.000	.0000										-.3610	-.1610	-.2620	-.1570	-.0380
169.000	.0000								.3400						
172.000	.0000						1.0150								
180.000	.0000	.8960	.2530	.0430	.2370	.8320			.5930		-.5970	-.3140	-.3440	-.3350	-.2300

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9202	.9639	1.0015	1.0392
PHI										
.000	-.0460							-.1260		-.1060
40.000	-.0590	-.0630		-.0580	-.0850	-.1180	-.1580			-.0930
70.000		-.0310	-.0640	-.1160	.1620	.0340	-.0390	-.0640		
90.000		-.0190	-.0330	.1470	.0640	.0380	-.0720	-.0880		
105.000				.2500	.0960	.0190	-.1040	-.1000		
110.000									-.1420	
120.000		-.0480	-.0080	.6000	.1420	-.0880	-.0850	.0030	-.0480	
135.000				.4580	.2470	-.2120	.0540	.1130		
150.000		-.0330	.1090	.2390	.1330	-.0020	.1740	.1180		
165.000		-.0690		.3270	.3780	.1510	.2060	-.0980		
180.000		-.1130	-.0070	.2250						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 OEA ORBITER FUSELAGE (RBH-40)

MACH (2) = 1.247 BETA (2) = -3.97U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.3990	-.3080	.0310			.0980		.1350	.0730	.0230	-.0460	-.0590
20.000	.0000		.2840	-.3160	-.2650	.0180			.0800		.0990				
40.000	.0000		.4120	-.2020	-.1220	-.0610			-.0210		-.0680	-.0620	-.0490	-.0590	-.0190
55.000	.0000		.4670	-.1290	-.0140	.1930			.2190		.1040				
75.000	.0000		.4780	-.1110	.0070	.2790			.2750		.0680	-.2320	-.2110	-.0710	-.0030
90.000	.0000	1.0570	.4560	-.0810	.0500	.3440			.3080		.0110	-.2890	-.2740	-.0770	-.0220
105.000	.0000														
110.000	.0000														
120.000	.0000		.4300	-.0250	.1670	.5020			.3870		-.0670	-.3440	-.2630	-.1300	-.0280
135.000	.0000														
142.000	.0000									-.3620					
150.000	.0000		.3950	-.0160	.2420	.7690			.5530		-.2810	-.2680	-.2200	-.1720	-.0350
157.000	.0000							.7990							
162.000	.0000								.4490						
165.000	.0000										-.5470	-.2140	-.2370	-.1560	-.0270
169.000	.0000								.3520						
172.000	.0000						1.0310								
180.000	.0000	.9100	.2560	.0400	.2150	.8880			.6210		-.5580	-.3640	-.2720	-.1570	-.0770

X/LB	.5873	.6626	.7385	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0250							-.1140		-.1260
40.000	-.0330	-.0230		-.0240	-.0480	-.0890	-.1440			-.1190
75.000		-.0660	-.0860	-.0810	.1000	-.0120	-.0870	-.1140		
90.000		-.0420	-.0340	.1090	.0100	-.0080	-.1230	-.1250		
105.000				.1860	.0280	-.0360	-.1460	-.1260		
110.000									-.1870	
120.000		-.0370	.0660	.4730	.0670	-.1650	-.0900	-.0530	-.1020	
135.000				.5510	.2850	-.1830	-.0010	.0360		
150.000		-.0160	.1660	.3030	.2380	-.0030	.0700	.0180		
165.000		-.0060		.3500	.3850	.1250	.1000	-.1840		
180.000		-.0490	.0880	.3020						

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBPB40)

MACH (2) = 1.247 BETA (3) = -1.940

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.0000	.0000	.0000	-.4020	-.3320	.0440			.1150		.1410	.0750	.0260	-.0400	-.0540
20.000	.0000		.2710	-.3270	-.2740	.0220			.1160		.1170				
40.000	.0000		.3760	-.2290	-.1570	-.0290			.0330		-.0150	-.0280	-.0370	-.0590	-.0220
55.000	.0000		.4160	-.1740	-.0650	.1680			.2120		.0890				
70.000	.0000		.4220	-.1640	-.0620	.2520			.2540		.0370	-.2560	-.2310	-.0890	-.0080
90.000	.0000	1.0650	.3950	-.1350	-.0210	.3090			.2770		-.0280	-.3120	-.3000	-.0950	-.0240
105.000	.0000														
110.000	.0000														
120.000	.0000		.3810	-.0710	.1130	.4630			.3320		-.1140	-.3710	-.2790	-.1370	-.0210
135.000	.0000														
142.000	.0000									-.4160					
150.000	.0000		.3720	-.0340	.2100	.7440			.5220		-.3150	-.2980	-.2310	-.1450	-.0340
157.000	.0000							.7470							
162.000	.0000								.4130						
165.000	.0000										-.5850	-.2470	-.2320	-.1340	-.0340
169.000	.0000								.3540						
172.000	.0000						1.0240								
180.000	.0000	.9180	.2610	.0490	.2170	.9030			.6140		-.5540	-.4260	-.1910	-.1430	-.0460

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0013	1.0392
PHI										
.000	-.0120							-.1120		-.1310
40.000	-.0220	.0070		-.0040	-.0310	-.0730	-.1390			-.1310
70.000		-.0720	-.0920	-.0580	.0810	-.0420	-.1140	-.1400		
90.000		-.0450	-.0290	.0870	-.0110	-.0370	-.1410	-.1360		
105.000				.1390	.0120	-.0660	-.1640	-.1400		
110.000									-.2010	
120.000		-.0270	.1350	.3730	.0280	-.1950	-.0980	-.0830	-.1360	
135.000				.5830	.3010	-.1810	-.0450	-.0100		
150.000		-.0010	.1880	.3320	.2890	-.0130	.0110	-.0330		
165.000		.0000		.3450	.4040	.1120	.0530	-.2210		
180.000		-.0070	.1270	.3200						

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBPB4D)

MACH (2) = 1.246 BETA (4) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.4060	-.3430	.0470			.1390		.1430	.0720	.0260	-.0430	-.0550
20.000	.0000		.2530	-.3410	-.2860	.0340			.1250		.1260				
40.000	.0000		.3410	-.2560	-.1900	.0010			.0780		.0200	-.0150	-.0380	-.0700	-.0290
55.000	.0000		.3690	-.2150	-.1160	.1540			.1990		.0740				
70.000	.0000		.3690	-.2120	-.1230	.2280			.2330		.0130	-.2790	-.2530	-.1200	-.0110
90.000	.0000	.9600	.3390	-.1820	-.0850	.2830			.2460		-.0630	-.3340	-.3220	-.1170	-.0200
105.000	.0000														
110.000	.0000														
120.000	.0000		.3340	-.1090	.0570	.4240			.2730		-.1590	-.3990	-.2920	-.1170	-.0190
135.000	.0000														
142.000	.0000									-.4500					
150.000	.0000		.3430	-.0510	.1790	.7160			.4870		-.3490	-.3290	-.2380	-.1400	-.0230
157.000	.0000							.7010							
162.000	.0000								.3750						
165.000	.0000										-.6130	-.2890	-.2370	-.1220	-.0320
169.000	.0000								.3530						
172.000	.0000						1.0180								
180.000	.0000	.9230	.2610	.0480	.2170	.9050			.6170		-.5520	-.4530	-.1620	-.1320	-.0330

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0140							-.1140		-.1350
40.000	-.0110	.0170		.0060	-.0230	-.0760	-.1310			-.1530
70.000		-.0810	-.0950	-.0550	.0590	-.0660	-.1310	-.1650		
90.000		-.0430	-.0220	.0660	-.0210	-.0680	-.1640	-.1500		
105.000				.1090	-.0230	-.0930	-.1790	-.1570		
110.000									-.2240	
120.000		-.0240	.1360	.3090	-.0190	-.2290	-.1220	-.1170	-.1740	
135.000				.6200	.2970	-.1920	-.1090	-.0710		
150.000		-.0010	.2010	.3540	.3430	-.0240	-.0510	-.0910		
165.000		.0060		.3830	.4070	.0890	.0070	-.2660		
180.000		.0120	.1230	.3570						

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBPB40)

MACH (2) = 1.245 BETA (5) = 2.140

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.4070	-.3340	.0460			.1240		.1430	.0740	.0230	-.0410	-.0550
20.000	.0000		.2360	-.3530	-.2950	.0460			.1340		.1310				
40.000	.0000		.3070	-.2830	-.2180	.0210			.1170		.0540	-.0030	-.0380	-.0780	-.0370
55.000	.0000		.3210	-.2570	-.1670	.1380			.1940		.0660				
75.000	.0000		.3090	-.2590	-.1810	.2060			.2190		-.0100	-.2960	-.2740	-.1450	-.0100
90.000	.0000	.9570	.2840	-.2300	-.1450	.2510			.2180		-.1010	-.3550	-.3410	-.1180	-.0210
105.000	.0000														
110.000	.0000														
120.000	.0000		.2890	-.1500	.0030	.3790			.2140		-.2020	-.4280	-.3110	-.1110	-.0130
135.000	.0000									-.4840					
142.000	.0000														
150.000	.0000		.3180	-.0660	.1560	.6810			.4470		-.4030	-.3580	-.2330	-.1420	-.0250
157.000	.0000							.6470							
162.000	.0000								.3300						
165.000	.0000										-.6280	-.3360	-.2350	-.1300	-.0340
169.000	.0000								.3480						
172.000	.0000						.9960								
180.000	.0000	.9240	.2620	.0500	.2210	.9010			.6090		-.5460	-.4400	-.1920	-.1410	-.0370

X/LB	.5973	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0170							-.1120		-.1380
40.000	.0000	.0290		.0130	-.0180	-.0680	-.1230			-.1650
70.000		-.0760	-.0900	-.0440	.0300	-.0910	-.1550	-.1830		
90.000		-.0350	-.0620	.0490	-.0390	-.0890	-.1800	-.1650		
105.000				.0650	-.0520	-.1180	-.1910	-.1780		
111.000									-.2490	
120.000		-.0120	.1620	.2620	-.0630	-.2660	-.1540	-.1500	-.2070	
135.000				.6470	.2990	-.2110	-.1760	-.1330		
150.000		.0060	.2000	.4110	.3890	-.0370	-.1020	-.1360		
165.000		.0060		.4270	.4090	.0610	-.0380	-.3050		
180.000		.0030	.1310	.3390						

AMES 11-7X7 OA12 OEA ORBITER FUSELAGE (RBPB40)

MACH (2) = 1.245 BETA (6) = 4.21

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.0000	.0000	.0000	-.4060	-.3150	.0290			.1140		.1350	.0710	.0190	-.0450	-.0610
20.000	.0000		.2170	-.3640	-.3070	.0490			.1330		.1320				
40.000	.0000		.2700	-.3070	-.2480	.0330			.1350		.0660	-.0020	-.0490	-.0920	-.0490
55.000	.0000		.2700	-.2960	-.2110	.1180			.1910		.0530				
70.000	.0000		.2530	-.3040	-.2330	.1830			.2050		-.0310	-.3150	-.2970	-.1630	-.0660
90.000	.0000	.8530	.2270	-.2770	-.2020	.2180			.1940		-.1280	-.3750	-.3600	-.1170	-.0150
105.000	.0000														
110.000	.0000														
120.000	.0000		.2410	-.1890	-.0410	.3250			.1480		-.2440	-.4540	-.3200	-.1180	-.0100
135.000	.0000														
142.000	.0000									-.5220					
150.000	.0000		.2850	-.1850	.1230	.6280			.3990		-.4790	-.3950	-.2070	-.1500	-.0260
157.000	.0000							.5770							
162.000	.0000								.2800						
165.000	.0000										-.6400	-.3940	-.2190	-.1460	-.0570
169.000	.0000								.3370						
172.000	.0000						.9630								
180.000	.0000	.9190	.2570	.0490	.2160	.8850			.5920		-.5450	-.4160	-.2480	-.1620	-.0710

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0240							-.1180		-.1370
40.000	-.0010	.0330		.0170	-.0240	-.0630	-.1190			-.1760
70.000		-.0620	-.0890	-.0380	.0180	-.1090	-.1760	-.1990		
90.000		-.0240	-.0050	.0410	-.0490	-.1070	-.1960	-.1790		
105.000				.0510	-.0760	-.1390	-.2010	-.1960		
110.000									-.2650	
120.000		-.0110	.1430	.2230	-.1060	-.3120	-.1860	-.1780	-.2390	
135.000				.6950	.2820	-.2930	-.2310	-.2000		
150.000		-.0010	.1510	.4440	.3960	-.0430	-.1460	-.1810		
165.000		-.0150		.4650	.4590	.0210	-.0730	-.3270		
180.000		-.0430	.0780	.3100						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7X7 OA12 OBA ORBITER FUSELAGE (RBFB40)

MACH (2) = 1.247 BETA (7) = 9.34

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3295	.3953	.5125
PHI															
.000	.0000	.0000	.0000	-.4059	-.2940	.0030			.0680		.1110	.0660	.0120	-.0510	-.0740
25.000	.0000		.1810	-.3840	-.3390	.0110			.0990		.1220				
40.000	.0000		.1920	-.3560	-.2990	.0420			.1550		.0740	-.0160	-.0750	-.1220	-.0680
55.000	.0000		.1700	-.3690	-.2990	.0940			.1730		.0390				
70.000	.0000		.1310	-.3850	-.3330	.1650			.1780		-.0610	-.3590	-.3310	-.1710	-.0630
90.000	.0000	.7410	.1130	-.3620	-.3030	.1680			.1410		-.1750	-.4080	-.3870	-.1190	-.0640
105.000	.0000														
115.000	.0000														
125.000	.0000		.1480	-.2570	-.1130	.2130			.0030		-.3190	-.4960	-.3210	-.1340	-.0130
135.000	.0000									-.5910					
142.000	.0000										-.5720	-.4540	-.2280	-.1670	-.0480
150.000	.0000		.2260	-.1150	.0750	.5040			.2730						
157.000	.0000							.4500							
162.000	.0000								.2990						
165.000	.0000										-.6450	-.4810	-.2250	-.2360	-.1100
169.000	.0000								.3110						
172.000	.0000						.8790								
180.000	.0000	.9180	.2450	.0560	.2190	.8240			.5620		-.5490	-.3300	-.3440	-.3190	-.2280

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0440							-.1280		-.1140
40.000	-.1480	.0230		.0280	-.0120	-.0590	-.1120			-.1920
70.000		-.0540	-.0980	-.0290	.0240	-.1350	-.2100	-.2360		
90.000		-.0230	-.0160	.0360	-.0530	-.1360	-.2230	-.2170		
105.000				.0430	-.1300	-.1770	-.2300	-.2310		
115.000									-.3040	
125.000		-.0110	.0810	.1740	-.1830	-.3920	-.2290	-.2280	-.2780	
135.000				.7580	.2690	-.3230	-.3310	-.3390		
150.000		-.0360	-.0270	.3410	.3040	-.0430	-.1950	-.2350		
165.000		-.0970		.4380	.4630	-.0350	-.1510	-.3710		
180.000		-.1110	.0000	.2440						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB40)

MACH (3) = 1.396 BETA (1) = -8.040

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.2870	-.2160	-.0150			-.0030		.0470	.0560	.0420	-.0080	-.0400
25.000	.0000		.3670	-.1980	-.1900	-.0510			-.0160		.0020				
40.000	.0000		.5400	-.0630	-.0180	-.1300			-.1430		-.1860	-.1940	-.1460	-.0700	-.0130
55.000	.0000		.6290	.0520	.1290	.1910			.2870		.1880				
70.000	.0000		.6600	.0920	.1770	.2510			.3770		.1890	-.0980	-.1270	-.0620	.0470
90.000	.0000	1.2090	.6450	.1190	.2130	.3100			.4380		.1490	-.1460	-.1390	-.0290	.0170
105.000	.0000														
110.000	.0000														
120.000	.0000		.6000	.1500	.2910	.5450			.5720		.0840	-.1850	-.1450	-.0880	-.0340
135.000	.0000														
142.000	.0000									-.0060					
150.000	.0000		.5230	.1030	.3050	.8310			.6820		-.1340	-.1690	-.1440	-.1300	-.0740
157.000	.0000							.9360							
162.000	.0000								.5880						
165.000	.0000										-.3040	-.0990	-.2090	-.1110	-.0560
169.000	.0000								.4310						
172.000	.0000						1.1120								
180.000	.0000	.9650	.3340	.1110	.2360	.8300			.6730		-.4570	-.2930	-.2500	-.2800	-.2580

X/LB	.5873	.6626	.7380	.7869	.8283	.8648	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0300							-.1020		-.0060
40.000	-.0390	-.0630		-.0760	-.1020	-.1250	-.1530			-.0070
70.000		-.0500	-.0360	-.1060	.0810	.0610	.0120	-.0230		
90.000		-.0220	.0000	.1470	.0770	.0610	-.0280	-.0420		
105.000				.2560	.1510	.0150	-.0320	-.0720		
110.000									-.1120	
120.000		-.0500	-.0090	.6160	.2240	-.0450	-.0690	-.0460	-.0020	
135.000				.4370	.2790	-.1660	-.0790	.1200		
150.000		-.0450	.0260	.1890	.1590	-.0730	.1680	.1640		
165.000		-.0150		.2730	.3980	.1680	.2310	-.0200		
180.000		-.1310	-.0870	.1870						

AMES 11-7X7 OA12 OBA ORBITER FUSELAGE (RBFB4U)

MACH (3) = 1.399 BETA (2) = -3.97U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/L	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.2820	-.2240	-.0020			.0230		.0640	.0810	.0590	-.0020	-.0360
2.000	.0000		.3530	-.2120	-.1990	-.0200			.0070		.0450				
4.000	.0000		.4840	-.1180	-.0680	-.0850			-.0600		-.0720	-.1070	-.0590	-.0370	-.0180
95.000	.0000		.5390	-.0410	.0240	.1200			.2240		.1340				
7.000	.0000		.5470	-.0220	.0530	.1670			.3080		.1140	-.1480	-.1820	-.0630	.0110
9.000	.0000	1.1190	.5270	.0050	.0760	.1910			.3590		.0690	-.1970	-.1950	-.0280	-.0120
105.000	.0000														
11.000	.0000														
12.000	.0000		.5080	.0620	.1740	.4760			.4140		.0010	-.2390	-.2040	-.1310	-.0370
135.000	.0000									-.2480					
142.000	.0000														
15.000	.0000		.4760	.0610	.2390	.7860			.6350		-.1820	-.2390	-.1640	-.1520	-.0510
157.000	.0000							.8630							
162.000	.0000								.5340						
165.000	.0000										-.4170	-.1590	-.1080	-.1340	-.0520
169.000	.0000								.4390						
172.000	.0000						1.0860								
18.000	.0000	.9810	.3380	.1120	.2270	.9260			.6870		-.4170	-.3050	-.2430	-.1430	-.1270
X/L	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0230							-.0930		-.0920					
4.000	-.0160	-.0230		-.0370	-.0630	-.0850	-.1170			-.0930					
7.000		-.0640	-.0590	-.0890	.0370	.0140	-.0450	-.0720							
9.000		-.0410	-.0190	.1100	.0210	-.0640	-.0760	-.0870							
105.000				.1880	.0650	-.0230	-.0940	-.1130							
11.000									-.1160						
12.000		-.0330	.0340	.4410	.1560	-.1060	-.1050	-.0350	-.0630						
135.000				.5270	.3400	-.1300	-.0010	.0620							
15.000		-.0190	.0540	.2680	.2620	.0110	.1090	.0810							
165.000		-.0070		.3050	.4260	.1680	.1560	-.0970							
18.000		-.0680	-.0200	.2590											

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBPB40)

MACH (3) = 1.397 BETA (3) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.00	.0000	.0000	.0000	-.2860	-.2320	.0690			.0440		.0790	.0940	.0600	.0010	-.0350
20.00	.0000		.3260	-.2320	-.2120	.0620			.0380		.0730				
40.00	.0000		.4160	-.1570	-.1240	-.0340			.0060		.0060	-.0260	-.0160	-.0320	-.0140
55.00	.0000		.4420	-.1190	-.0660	.0690			.1830		.1090				
70.00	.0000		.4360	-.1150	-.0580	.1020			.2550		.0670	-.1960	-.2270	-.1030	.0030
90.00	.0000	1.0200	.4160	-.0890	-.0360	.1170			.2860		-.0110	-.2460	-.2460	-.1130	-.0080
105.00	.0000														
110.00	.0000														
120.00	.0000		.4150	-.0150	.0870	.3860			.3380		-.0910	-.3000	-.2380	-.1530	-.0210
135.00	.0000														
142.00	.0000									-.3190					
150.00	.0000		.4220	.0330	.1970	.7210			.5630		-.2580	-.2690	-.1810	-.1170	-.0460
157.00	.0000							.7640							
162.00	.0000								.4580						
165.00	.0000										-.4640	-.2340	-.1840	-.1090	-.0540
169.00	.0000								.4410						
172.00	.0000						1.0850								
180.00	.0000	.9970	.3490	.1220	.2360	.9430			.6900		-.4080	-.3480	-.1390	-.1130	-.0650

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.00	-.0180							-.0860		-.0950
40.00	-.0690	.0010		-.0160	-.0350	-.0610	-.1040			-.1230
70.00		-.0760	-.0710	-.0610	.0210	-.0360	-.0820	-.1230		
90.00		-.0430	-.0220	.0730	-.0210	-.0520	-.1150	-.1240		
105.00				.1170	.0260	-.0740	-.1360	-.1360		
110.00									-.1620	
120.00		-.0140	.0480	.3470	.0750	-.1850	-.1240	-.0800	-.1300	
135.00				.5850	.3470	-.1350	-.0520	-.0310		
150.00		.0050	.0760	.3080	.3620	.0350	.0140	-.0160		
165.00		.0080		.3410	.4210	.1560	.0760	-.1750		
180.00		.0080	.0110	.3200						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB40)

MACH (3) = 1.394 BETA (4) = 4.210

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.2890	-.2310	.0690			.0350		.0890	.0950	.0620	-.0020	-.0390
20.000	.0000		.2930	-.2540	-.2280	.0070			.0530		.0910				
40.000	.0000		.3440	-.2070	-.1780	.0010			.0520		.0620	.0230	-.0030	-.0410	-.0280
55.000	.0000		.3430	-.1970	-.1490	.0230			.1670		.0930				
70.000	.0000		.3160	-.2030	-.1580	.0410			.2110		.0280	-.2330	-.2440	-.1340	.0070
90.000	.0000	.9140	.3040	-.1780	-.1370	.0560			.2110		-.0690	-.2820	-.2840	-.1210	.0010
105.000	.0000														
110.000	.0000														
125.000	.0000		.3190	-.0890	.0010	.3020			.1780		-.1800	-.3570	-.2650	-.1370	-.0230
135.000	.0000														
142.000	.0000									-.3950					
150.000	.0000		.3630	.0030	.1450	.6380			.4620		-.3750	-.3190	-.1970	-.1200	-.0520
157.000	.0000							.6360							
162.000	.0000								.3680						
165.000	.0000										-.4860	-.3340	-.1910	-.1140	-.0820
169.000	.0000								.4270						
172.000	.0000						1.0260								
180.000	.0000	.9960	.3420	.1240	.2340	.9270			.6700		-.4050	-.3190	-.2260	-.1350	-.1060

X/LB	.5873	.6626	.7380	.7869	.8287	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0210							-.0970		-.1000
40.000	-.0050	.0150		.0050	-.0190	-.0510	-.1050			-.1350
70.000		-.0720	-.0770	-.0560	.0050	-.0730	-.1170	-.1570		
90.000		-.0320	-.0280	.0370	-.0490	-.0850	-.1470	-.1440		
105.000				.0780	-.0280	-.1050	-.1710	-.1570		
110.000									-.1920	
125.000		-.0050	.0540	.2290	-.0120	-.2510	-.1600	-.1430	-.1830	
135.000				.6260	.3390	-.1720	-.1470	-.1580		
150.000		.0670	-.0030	.3920	.4290	.0200	-.0650	-.1050		
165.000		-.0100		.4240	.4950	.0960	-.0030	-.2230		
180.000		-.0350	-.0270	.2650						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB49)

MACH (3) = 1.392 BETA (5) = 8.360

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.2920	-.2170	-.0690			.0150		.0650	.0730	.0460	-.0020	-.0430
20.000	.0000		.2580	-.2740	-.2450	-.0070			.0320		.0840				
40.000	.0000		.2680	-.2530	-.2240	.0000			.0460		.0810	.0310	-.0180	-.0670	-.0580
55.000	.0000		.2470	-.2650	-.2250	.0050			.0520		.0750				
70.000	.0000		.2080	-.2770	-.2470	-.0010			.0770		.0020	-.2640	-.2620	-.1590	.0110
90.000	.0000	.8010	.1930	-.2580	-.2240	.0120			.0360		-.1160	-.3130	-.3150	-.1140	.0000
105.000	.0000														
110.000	.0000														
125.000	.0000		.2300	-.1550	-.0820	.1840			.0430		-.2660	-.4090	-.2800	-.1490	-.0320
135.000	.0000														
142.000	.0000									-.4510					
150.000	.0000		.3010	-.0310	.0960	.5290			.0290		-.4490	-.3810	-.2150	-.1440	-.0750
157.000	.0000							.5430							
162.000	.0000								.3150						
165.000	.0000										-.4940	-.3870	-.2620	-.2160	-.1440
169.000	.0000								.4070						
172.000	.0000						.9410								
180.000	.0000	.9800	.3250	.1180	.2330	.8700			.6470		-.4380	-.2510	-.2530	-.2910	-.2540

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0330							-.1090		-.1020
40.000	-.0190	.0030		.0180	-.0110	-.0450	-.1000			-.1470
70.000		-.0570	-.0730	-.0580	.0010	-.0880	-.1360	-.1810		
90.000		-.0200	-.0350	.0450	-.0600	-.1170	-.1730	-.1670		
105.000				.0520	-.0670	-.1460	-.2010	-.1820		
110.000									-.2290	
120.000		-.0070	-.0090	.1970	-.0930	-.2970	-.2190	-.1980	-.2270	
135.000				.7740	.3210	-.2320	-.2270	-.2580		
150.000		-.0400	-.0590	.3030	.3420	-.0210	-.1180	-.1560		
165.000		-.1010		.3920	.5020	.0530	-.0770	-.2840		
180.000		-.1360	-.0970	.1950						

AMES 11-7ft OA12 OBA ORBITER FUSELAGE (RBFB41) (01 MAY 73)

REFERENCE DATA

SREF = 2.421U SQ.FT. XMRP = 28.53UU INCHES
LREF = 39.849U INCHES YMRP = .UUUU INCHES
BREF = 39.849U INCHES ZMRP = .UUUU INCHES
SCALE = .03UU SCALE

PARAMETRIC DATA

ALPHA = -4.UUU RUDDER = -10.UU
ELEVON = .UUU FLCFLR = .UU

MACH (1) = .6UU BETA (1) = -4.91U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.UUUU	.UU75	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.UUU	.UUUU	.UUUU	.UUUU	-.887U	-.177U	-.187U			-.09UU		-.198U	-.181U	-.059U	-.053U	-.054U
25.UUU	.UUUU		-.592U	-.802U	-.243U	-.127U			-.129U		-.137U				
40.UUU	.UUUU		-.312U	-.613U	-.262U	-.299U			-.305U		-.342U	-.264U	-.178U	-.122U	-.085U
55.UUU	.UUUU		-.127U	-.396U	-.187U	-.054U			-.052U		-.106U				
70.UUU	.UUUU		.UU2U	-.262U	-.165U	.035U			-.011U		-.106U	-.328U	-.036U	.050U	.072U
90.UUU	.UUUU	.696U	.099U	-.153U	.068U	.049U			-.015U		-.112U	-.357U	-.043U	.026U	.042U
105.UUU	.UUUU														
110.UUU	.UUUU														
120.UUU	.UUUU		.238U	.068U	.191U	.174U			-.018U		-.150U	-.217U	-.045U	.005U	.036U
135.UUU	.UUUU									-.298U					
142.UUU	.UUUU														
150.UUU	.UUUU		.270U	.176U	.281U	.447U			.026U		-.391U	-.135U	-.052U	-.014U	.017U
157.UUU	.UUUU							.392U							
162.UUU	.UUUU								-.049U						
165.UUU	.UUUU										-.331U	-.125U	-.038U	-.011U	.013U
169.UUU	.UUUU								-.112U						
172.UUU	.UUUU						.662U								
180.UUU	.UUUU	.680U	.135U	.150U	.238U	.553U			.215U		-.497U	-.155U	-.139U	-.064U	-.029U

X/LB	.5873	.6626	.738U	.7869	.8283	.8848	.9262	.9639	1.UU15	1.U392
PHI										
.UUU	-.073U							-.128U		-.159U
40.UUU	-.112U	-.199U		-.210U	-.246U	-.225U	-.159U			-.152U
70.UUU		-.011U	-.045U	-.028U	.052U	-.005U	-.009U	-.051U		
90.UUU		.015U	.024U	.025U	.035U	-.039U	-.050U	-.075U		
105.UUU				.069U	-.032U	-.063U	-.071U	-.104U		
110.UUU									-.170U	
120.UUU		.039U	.162U	.248U	-.244U	-.116U	-.056U	-.071U	-.146U	
135.UUU				.424U	.058U	-.112U	-.062U	-.100U		
150.UUU		.042U	.160U	.237U	.015U	-.064U	-.069U	-.154U		
165.UUU		.045U		.232U	.192U	.000U	-.075U	-.186U		
180.UUU		-.006U	.064U	.115U						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBFB41)

MACH (1) = .998 BETA (2) = .09U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1661	.1732	.1958	.2259	.2711	.3266	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.8840	-.1590	-.0720			-.0750		-.0920	-.0700	-.0500	-.0380	-.0460
20.000	.0000		-.6430	-.7970	-.1890	-.0880			-.0880		-.1070				
40.000	.0000		-.4550	-.6380	-.2090	-.1810			-.1830		-.2200	-.1700	-.0930	-.0620	-.0480
55.000	.0000		-.3210	-.5070	-.1130	-.0800			-.0870		-.1350				
70.000	.0000		-.2160	-.4110	-.0840	-.0370			-.0740		-.1630	-.3650	-.0650	.0230	.0480
90.000	.0000	.5240	-.1330	-.3360	-.0480	-.0560			-.1090		-.1790	-.3890	-.0780	.0040	.0220
105.000	.0000														
110.000	.0000														
120.000	.0000		.0470	-.1000	.0670	.0240			-.2080		-.1990	-.2500	-.0690	-.0130	.0190
135.000	.0000														
142.000	.0000									-.4050					
150.000	.0000		.1840	.1000	.2170	.3430			-.1040		-.3680	-.1470	-.0590	-.0170	.0250
157.000	.0000							.2400							
162.000	.0000								-.1940						
165.000	.0000										-.3620	-.1220	-.0530	-.0110	.0160
169.000	.0000								-.1510						
172.000	.0000						.6490								
180.000	.0000	.7260	.1750	.1820	.2750	.5870			.2440		-.4440	-.1190	-.0830	-.0240	.0190

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0580							-.1230		-.1540
40.000	-.0610	-.1450		-.1760	-.2190	-.2040	-.1540			-.1550
70.000		-.0400	-.0930	-.0940	-.0220	-.0550	-.0480	-.0690		
90.000		-.0080	-.0260	-.0650	-.0640	-.0940	-.0910	-.0970		
105.000				-.0650	-.1440	-.1250	-.1170	-.1280		
110.000									-.2000	
120.000		.0210	.1240	-.0170	-.4130	-.1960	-.1180	-.1140	-.1780	
135.000				.4500	-.0260	-.2230	-.1470	-.1510		
150.000		.0410	.1600	.3250	.0760	-.1690	-.1550	-.1960		
165.000		.0440		.2590	.1880	-.1210	-.1770	-.1910		
180.000		.0430	.1220	.1670						

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBPB41)

MACH (1) = .600 BETA (3) = 5.280

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.0960	-.1750	-.1870			-.1080		-.1040	-.0900	-.0650	-.0520	-.0580
20.000	.0000		-.7090	-.8280	-.1710	-.0780			-.0810		-.1050				
40.000	.0000		-.5970	-.6910	-.1860	-.1140			-.1160		-.1660	-.1250	-.0670	-.0470	-.0350
55.000	.0000		-.5160	-.6470	-.1530	-.0950			-.1190		-.1580				
75.000	.0000		-.4570	-.5650	-.1560	-.0980			-.1400		-.2050	-.3940	-.0880	-.0620	.0270
90.000	.0000	.3200	-.3930	-.5070	-.1570	-.1470			-.2060		-.2460	-.4150	-.0990	-.0190	.0080
105.000	.0000														
110.000	.0000														
120.000	.0000		-.1640	-.2750	-.0920	-.1370			-.4180		-.2680	-.2900	-.1130	-.0500	-.0120
135.000	.0000														
142.000	.0000									-.6360					
150.000	.0000		.0430	-.0140	.0930	.1880			-.2660		-.3930	-.1860	-.1030	-.0510	-.0040
157.000	.0000							.0140							
165.000	.0000								-.4010						
165.000	.0000										-.3930	-.1480	-.0720	-.0650	-.0510
169.000	.0000								-.2370						
172.000	.0000						.5620								
180.000	.0000	.6960	.1500	.1560	.2400	.5460			.2030		-.4870	-.1560	-.1210	-.0600	-.0230

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0750							-.1300		-.1640
40.000	-.0470	-.1280		-.1610	-.1980	-.2040	-.1540			-.1650
75.000		-.0670	-.1470	-.1680	-.0820	-.1100	-.0870	-.1080		
90.000		-.0380	-.0810	-.1520	-.1390	-.1520	-.1320	-.1260		
105.000				-.1980	-.2530	-.1980	-.1610	-.1620		
110.000									-.2250	
120.000		-.0250	.0500	-.2440	-.6440	-.2900	-.1870	-.1680	-.2120	
135.000				.3970	-.1840	-.4210	-.2840	-.2420		
150.000		.0120	.1150	.3020	.1170	-.2800	-.2500	-.2440		
165.000		-.0270		.2200	.1380	-.3090	-.2710	-.1870		
180.000		-.0010	.0790	.1210						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7D7 OA12 O2A ORBITER FUSELAGE (RBPB41)

MACH (2) = .900 BETA (1) = -4.990

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI									-.1060		-.1770	-.1370	-.0600	-.0230	-.0100
.000	.0000	.0000	.0000	-.6440	-.5180	-.0520			-.1370		-.2120				
20.000	.0000		-.2790	-.7430	-.4300	-.1020			-.3540		-.4270	-.4600	-.1480	-.0910	-.0380
40.000	.0000		-.0540	-.7780	-.2970	-.3050			-.0680		-.1250				
55.000	.0000		.0760	-.5210	-.0740	-.0320			-.0160		-.1130	-.6830	.0170	.0760	.1110
70.000	.0000		.1580	-.3420	.0200	.0740			-.0220		-.1210	-.7770	.0100	.0600	.0750
90.000	.0000	.8450	.2200	-.1890	.0980	.1030									
105.000	.0000														
110.000	.0000								.0210		-.1500	-.7900	.0270	.0430	.0660
120.000	.0000		.3180	.0650	.2450	.2650									
135.000	.0000									-.7280					
142.000	.0000								.2580		-.4760	-.5070	-.0010	.0230	.0510
150.000	.0000		.3330	.1940	.3320	.5710		.5540							
157.000	.0000								.1660						
162.000	.0000										-.6550	-.4570	.1320	.0270	.0490
165.000	.0000								.0850						
169.000	.0000						.8140								
172.000	.0000								.3840		-1.1010	-.4870	-.0890	-.0320	.0440
180.000	.0000	.8090	.1890	.1780	.2920	.6880									
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI								-.0970		-.1450					
.000	-.0220									-.1530					
40.000	-.1400	-.2060		-.2360	-.3270	-.4490	-.2080								
70.000		.0400	-.0220	-.0420	.0140	-.0360	.0080	-.0230							
90.000		.0640	.0580	.0370	-.0370	-.0730	-.0270	-.0280							
105.000				.0990	-.1000	-.1040	-.0520	-.0520							
110.000									-.2220						
120.000		.0730	.2030	.2710	-.2850	-.1500	-.0330	-.0440	-.1660						
135.000				.5010	.0940	-.1150	-.0260	-.0680							
150.000		.0730	.2160	.3060	.0680	-.0420	-.0090	-.1320							
165.000		.0750		.3060	.2400	.0360	.0020	-.2320							
180.000		.0240	.1220	.1850											

AMES 11-7X7 OA12 O2A ORBITER FUSELAGE (RBFB41)

MACH (2) = .900 BETA (2) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.0000	.0000	.0000	-.6180	-.5100	-.0340			-.0990		-.1490	-.1300	-.0470	-.0180	.0000
20.000	.0000		-.3350	-.7010	-.4750	-.0650			-.1110		-.1720				
40.000	.0000		-.1730	-.8050	-.2290	-.1820			-.2310		-.2980	-.3240	-.0680	-.0380	-.0010
55.000	.0000		-.0920	-.7870	-.0950	-.0610			-.1300		-.1660				
70.000	.0000		-.0420	-.6710	-.0530	-.0420			-.1180		-.1810	-.7070	-.0080	.0490	.0820
90.000	.0000	.6850	.0000	-.4870	-.0190	-.0410			-.1490		-.2250	-.7890	-.0180	.0370	.0530
105.000	.0000														
110.000	.0000														
120.000	.0000		.1350	-.1300	.1020	.1290			-.1710		-.3010	-.7010	-.0150	.0170	.0510
135.000	.0000														
142.000	.0000									-1.0640					
150.000	.0000		.2360	.1070	.2540	.4810			.1670		-.6850	-.3420	-.0110	.0140	.0440
157.000	.0000							.4180							
162.000	.0000								.0560						
165.000	.0000										-.8380	-.3530	.2080	.0270	.0440
169.000	.0000								.0750						
172.000	.0000						.7980								
180.000	.0000	.8300	.2020	.2010	.3170	.7170			.4020		-1.0850	-.2810	-.0150	.0080	.0420

X/LB	.9873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0150							-.0910		-.1320
40.000	-.0460	-.1440		-.2180	-.3060	-.4190	-.2430			-.1490
70.000		.0160	-.0540	-.1300	-.1090	-.2280	-.0660	-.0600		
90.000		.0410	.0240	-.0660	-.1770	-.3200	-.0950	-.0710		
105.000				-.0320	-.2740	-.3590	-.1150	-.1020		
110.000									-.2360	
120.000		.0570	.1760	.0710	-.4740	-.4090	-.1280	-.1160	-.1990	
135.000				.4990	.0360	-.4300	-.1860	-.1780		
150.000		.0710	.2120	.3760	.1340	-.2630	-.1650	-.2260		
165.000		.0720		.3190	.2300	-.1640	-.1550	-.2280		
180.000		.0700	.1730	.2280						

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBPB41)

MACH (2) = .901 BETA (3) = 5.360

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.6390	-.5280	-.0480			-.0980		-.1800	-.1380	-.0590	-.0290	-.0120
20.000	.0000		-.3840	-.6750	-.5320	-.0400			-.0950		-.1770				
40.000	.0000		-.2880	-.8170	-.2600	-.0880			-.1470		-.2780	-.2020	-.0450	-.0160	.0130
55.000	.0000		-.2530	-.8500	-.0780	-.0680			-.1590		-.3380				
75.000	.0000		-.2270	-.8710	-.0420	-.0530			-.1790		-.4420	-.6580	-.0450	.0400	.0740
90.000	.0000	.5180	-.1940	-.7630	-.1000	-.0890			-.2430		-.4870	-.7580	-.0540	.0290	.0420
105.000	.0000														
110.000	.0000														
125.000	.0000		-.0430	-.3380	-.0640	-.0210			-.3420		-.5930	-.5520	-.0790	-.0020	.0300
135.000	.0000														
142.000	.0000									-1.1780					
150.000	.0000		.1230	-.0120	.1370	.3500			.0470		-.6200	-.4940	-.0690	.0380	.0370
157.000	.0000							.2370							
162.000	.0000								-.0910						
165.000	.0000										-.6640	-.5630	.3430	-.0090	-.0160
169.000	.0000								.0330						
172.000	.0000						.7250								
180.000	.0000	.7940	.1980	.1840	.2960	.6860			.3730		-.9930	-.5120	-.0960	-.0160	.0130

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0280							-.1000		-.1420
40.000	.0020	-.1150		-.2110	-.2880	-.3820	-.2210			-.1600
75.000		.0140	-.0650	-.1770	-.1810	-.4350	-.1980	-.1020		
90.000		.0370	.0050	-.1370	-.2670	-.4580	-.3300	-.1080		
105.000				-.1380	-.4170	-.4620	-.3660	-.1430		
110.000									-.2390	
120.000		.0420	.1380	-.1130	-.6370	-.5350	-.4700	-.1840	-.2190	
135.000				.5010	-.0310	-.7070	-.4920	-.4580		
150.000		.0450	.1620	.3120	.1740	-.3770	-.4430	-.3600		
165.000		.0210		.2780	.2150	-.3310	-.3770	-.2300		
180.000		.0400	.1440	.2040						

AMES 11-7D7 OA12 OBA ORBITER FUSELAGE (RBPB42) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = -4.000 RUDDER = -20.000
ELEVON = .000 RUDFLR = .000

MACH (1) = .596 BETA (1) = -4.900

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.8780	-.1640	-.0830			-.0870		-.0980	-.0830	-.0600	-.0480	-.0510
20.000	.0000		-.5820	-.7830	-.2370	-.1220			-.1260		-.1300				
40.000	.0000		-.3010	-.5970	-.2610	-.2950			-.3020		-.3260	-.2620	-.1730	-.1110	-.0790
55.000	.0000		-.1180	-.3870	-.0860	-.0490			-.0550		-.0990				
70.000	.0000		.0690	-.2530	-.0460	.0370			-.0670		-.1000	-.3230	-.0400	.0510	.0800
90.000	.0000	.7060	.1000	-.1440	.0700	.0490			-.0110		-.1160	-.3570	-.0460	.0300	.0440
105.000	.0000														
110.000	.0000														
120.000	.0000		.2450	.0660	.1890	.1720			-.0150		-.1530	-.2130	-.0450	.0110	.0420
135.000	.0000														
142.000	.0000									-.2940					
150.000	.0000		.2730	.1790	.2770	.4440			.0290		-.3930	-.1350	-.0550	-.0460	.0260
157.000	.0000							.3930							
162.000	.0000								-.0520						
165.000	.0000										-.3380	-.1200	.1310	-.0670	.0260
169.000	.0000								-.1060						
172.000	.0000						.6580								
180.000	.0000	.6910	.1370	.1550	.2390	.5560			.2160		-.4930	-.1550	-.1410	-.0620	-.0230

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0720							-.1240		-.1660
40.000	-.1080	-.1910		-.2060	-.2400	-.2210	-.1590			-.1610
70.000		-.0110	-.0430	-.0280	.0580	-.0060	-.0100	-.0560		
90.000		.0200	.0280	.0200	.0250	-.0420	-.0460	-.0800		
105.000				.0610	-.0330	-.0720	-.0760	-.1120		
110.000									-.2040	
120.000		.0410	.1700	.2040	-.2000	-.1140	-.0590	-.0810	-.1500	
135.000				.4230	.0590	-.1150	-.0640	-.1090		
150.000		.0510	.1660	.2370	.0170	-.0720	-.0790	-.1710		
165.000		.0560		.2350	.1940	-.0050	-.0870	-.2090		
180.000		-.0010	.0710	.1150						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB42)

MACH (1) = .596 BETA (2) = .1UU

SECTION (1)ORBITEP FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.0850	-.1580	-.0750			-.0780		-.0870	-.0760	-.0580	-.0420	-.0430
25.000	.0000		-.6460	-.7980	-.1870	-.0890			-.0880		-.1090				
45.000	.0000		-.4490	-.6430	-.2100	-.1800			-.1840		-.2280	-.1750	-.0980	-.0600	-.0450
55.000	.0000		-.3160	-.5090	-.1190	-.0760			-.0860		-.1310				
75.000	.0000		-.2200	-.4120	-.0860	-.0380			-.0820		-.1600	-.3690	-.0680	.0220	.0520
90.000	.0000	.5230	-.1370	-.3310	-.0500	-.0530			-.1110		-.1860	-.3910	-.0790	.0040	.0280
105.000	.0000														
115.000	.0000														
125.000	.0000		.0520	-.0950	.0640	.0280			-.2120		-.2030	-.2520	-.0720	-.0120	.0200
135.000	.0000														
142.000	.0000									-.4000					
150.000	.0000		.1810	.1010	.2130	.3470			-.1050		-.3760	-.1510	-.0600	-.0190	.0160
157.000	.0000							.2400							
162.000	.0000								-.1940						
165.000	.0000										-.3660	-.1240	.0570	-.0140	.0150
169.000	.0000								-.1470						
172.000	.0000						.6470								
180.000	.0000	.7280	.1730	.1890	.2720	.5840			.2420		-.4570	-.1170	-.0860	-.0230	.0160

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0610							-.1270		-.1600
45.000	-.0660	-.1500		-.1840	-.2170	-.2060	-.1570			-.1610
70.000		-.0390	-.0910	-.0980	-.0200	-.0610	-.0510	-.0770		
90.000		-.0080	-.0240	-.0710	-.0660	-.1040	-.0930	-.1070		
105.000				-.0710	-.1440	-.1330	-.1180	-.1400		
115.000									-.2240	
120.000		.0190	.1220	-.0210	-.4140	-.2050	-.1230	-.1240	-.1630	
135.000				.4510	-.0290	-.2330	-.1580	-.1660		
150.000		.0420	.1680	.3300	.0800	-.1740	-.1730	-.2190		
165.000		.0450		.2570	.1870	-.1320	-.1860	-.2130		
180.000		.0450	.1240	.1680						

AMES 11-7X7 OA12 OEA ORBITER FUSELAGE (RBPB42)

MACH (1) = .998 BETA (3) = 5.290

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.0000	.0000	.0000	-.9010	-.1650	-.0870			-.0880		-.1160	-.0870	-.0600	-.0510	-.0520
20.000	.0000		-.7070	-.8300	-.1660	-.0800			-.0820		-.0980				
40.000	.0000		-.5950	-.6920	-.1810	-.1130			-.1180		-.1630	-.1250	-.0620	-.0420	-.0260
55.000	.0000		-.5160	-.6370	-.1560	-.0980			-.1170		-.1570				
70.000	.0000		-.4570	-.5680	-.1640	-.0980			-.1370		-.2020	-.3890	-.0880	.0000	.0340
90.000	.0000	.3230	-.3910	-.5070	-.1610	-.1450			-.2030		-.2430	-.4120	-.0950	-.0110	.0120
105.000	.0000														
110.000	.0000														
125.000	.0000		-.1620	-.2720	-.0890	-.1360			-.4130		-.2700	-.2920	-.1120	-.0490	-.0070
135.000	.0000														
142.000	.0000									-.6160					
150.000	.0000		.0530	-.0160	.0930	.1910			-.2650		-.3910	-.1810	-.1040	-.0490	-.0060
157.000	.0000							.0190							
162.000	.0000								-.3990						
165.000	.0000										-.3890	-.1440	-.0420	-.0580	-.0500
169.000	.0000								-.2350						
172.000	.0000						.5590								
180.000	.0000	.7130	.1490	.1630	.2370	.5480			.2050		-.4850	-.1480	-.1190	-.0580	-.0210

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0730							-.1290		-.1680
40.000	-.0470	-.1290		-.1620	-.2000	-.2030	-.1570			-.1720
70.000		-.0760	-.1410	-.1710	-.0820	-.1170	-.0920	-.1160		
90.000		-.0330	-.0760	-.1530	-.1390	-.1630	-.1330	-.1380		
105.000				-.2020	-.2480	-.1970	-.1670	-.1690		
110.000									-.2430	
120.000		-.0200	.0560	-.2540	-.6420	-.3010	-.1940	-.1790	-.2190	
135.000				.3980	-.1860	-.4290	-.2920	-.2570		
150.000		.0140	.1160	.2980	.1180	-.2910	-.2640	-.2640		
165.000		-.0250		.2230	.1400	-.3180	-.2820	-.2560		
180.000		.0630	.0830	.1250						

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBPB42)

MACH (2) = .904 BETA (1) = -4.980

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1906	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.6460	-.5130	-.0530			-.1060		-.1750	-.1380	-.0610	-.0250	-.0070
20.000	.0000		-.2760	-.7420	-.4260	-.1020			-.1370		-.2130				
40.000	.0000		-.0500	-.7750	-.2980	-.0030			-.3500		-.4540	-.4640	-.1490	-.0860	-.0360
55.000	.0000		.0750	-.5180	-.0750	-.0310			-.0670		-.1240				
70.000	.0000		.1550	-.3400	.0180	.0730			-.0140		-.1150	-.6800	.0110	.0780	.1070
90.000	.0000	.8470	.2170	-.1900	.1000	.1030			-.0190		-.1210	-.7740	.0020	.0590	.0720
105.000	.0000														
110.000	.0000														
125.000	.0000		.3160	.0680	.2430	.2670			.0230		-.1490	-.7870	.0290	.0440	.0650
135.000	.0000														
142.000	.0000									-.7170					
150.000	.0000		.3310	.1930	.3270	.5680			.2580		-.4710	-.5080	.0030	.0260	.0500
157.000	.0000							.5520							
162.000	.0000								.1660						
165.000	.0000										-.6610	-.4510	.0170	.0280	.0470
169.000	.0000								.0850						
172.000	.0000						.8120								
180.000	.0000	.8170	.1890	.1790	.2890	.6880			.3840		-1.0980	-.4870	-.0790	-.0260	.0050

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0220							-.1000		-.1450
40.000	-.0400	-.2030		-.2300	-.3250	-.4430	-.2050			-.1470
70.000		.0360	-.0220	-.0460	.0150	-.0430	.0070	-.0250		
90.000		.0600	.0560	.0350	-.0300	-.0760	-.0280	-.0320		
105.000				.0970	-.1030	-.1100	-.0470	-.0550		
110.000									-.2350	
120.000		.0730	.2010	.2710	-.2840	-.1570	-.0360	-.0460	-.1750	
135.000				.5010	.0910	-.1180	-.0250	-.0730		
150.000		.0710	.2130	.3060	.0630	-.0440	-.0120	-.1330		
165.000		.0770		.3070	.2390	.0320	-.0010	-.2430		
180.000		.0280	.1200	.1850						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RB°B42)

MACH (2) = .9UU BETA (2) = .1UU

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.UUUU	.UU75	.U188	.U339	.U6U2	.1355	.15U6	.1581	.1732	.1958	.2259	.2711	.32U6	.3953	.512U
PHI															
.UUU	.UUUU	.UUUU	.UUUU	-.613U	-.513U	-.U34U			-.U91U		-.147U	-.128U	-.U51U	-.U16U	-.UU2U
2U.UUU	.UUUU		-.339U	-.698U	-.464U	-.U64U			-.111U		-.172U				
4U.UUU	.UUUU		-.171U	-.8U8U	-.228U	-.182U			-.23UU		-.293U	-.324U	-.U7UU	-.U39U	-.UU1U
55.UUU	.UUUU		-.U93U	-.785U	-.U95U	-.U62U			-.131U		-.166U				
7U.UUU	.UUUU		-.U42U	-.671U	-.U51U	-.U2U			-.116U		-.177U	-.7U6U	-.U12U	.U48U	.U84U
9U.UUU	.UUUU	.687U	.UU2U	-.486U	-.U22U	-.UU3U			-.147U		-.221U	-.787U	-.U22U	.U36U	.U56U
1U5.UUU	.UUUU														
11U.UUU	.UUUU														
12U.UUU	.UUUU		.136U	-.128U	.U99U	.129U			-.172U		-.3U7U	-.694U	-.U14U	.U18U	.U53U
135.UUU	.UUUU														
142.UUU	.UUUU									-1.U65U					
15U.UUU	.UUUU		.235U	.1U7U	.257U	.48UU			.169U		-.687U	-.341U	-.U11U	.U17U	.U46U
157.UUU	.UUUU							.419U							
162.UUU	.UUUU								.U56U						
165.UUU	.UUUU										-.839U	-.362U	.U39U	.U28U	.U46U
169.UUU	.UUUU								.U77U						
172.UUU	.UUUU						.797U								
18U.UUU	.UUUU	.834U	.2U9U	.2U2U	.319U	.716U			.4U4U		-1.U8UU	-.278U	-.U15U	.UU8U	.U42U

X/LB	.5873	.6626	.738U	.7869	.8283	.8846	.9262	.9639	1.UU15	1.U392
PHI										
.UUU	-.U15U							-.U9UU		-.139U
4U.UUU	-.UU5U	-.144U		-.217U	-.3U3U	-.416U	-.256U			-.157U
7U.UUU		.U18U	-.U54U	-.12UU	-.1U9U	-.229U	-.U64U	-.U59U		
9U.UUU		.U42U	.U26U	-.U66U	-.176U	-.34UU	-.U99U	-.U77U		
1U5.UUU				-.U33U	-.275U	-.37UU	-.117U	-.1U9U		
11U.UUU									-.257U	
12U.UUU		.U61U	.179U	.U69U	-.475U	-.395U	-.131U	-.12UU	-.2U9U	
135.UUU				.5U4U	.U38U	-.422U	-.188U	-.175U		
15U.UUU		.U75U	.215U	.378U	.137U	-.251U	-.161U	-.231U		
165.UUU		.U72U		.322U	.235U	-.162U	-.153U	-.245U		
18U.UUU		.U7UU	.177U	.232U						

AMES 11-7D7 OA12 O2A ORBITER FUSELAGE (RBPB42)

MACH (2) = .901 BETA (3) = 5.360

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.6420	-.5300	-.0460			-.1060		-.1850	-.1390	-.0620	-.0260	-.0110
25.000	.0000		-.3860	-.6690	-.5290	-.0400			-.0980		-.1840				
40.000	.0000		-.2890	-.8190	-.2580	-.0890			-.1500		-.2780	-.2100	-.0440	-.0140	.0150
55.000	.0000		-.2570	-.8430	-.0840	-.0720			-.1570		-.3340				
70.000	.0000		-.2300	-.8820	-.0450	-.0570			-.1780		-.4090	-.6550	-.0410	.0410	.0740
90.000	.0000	.5160	-.1960	-.7660	-.1020	-.0920			-.2430		-.4980	-.7790	-.0500	.0300	.0470
105.000	.0000														
110.000	.0000														
120.000	.0000		-.0440	-.3440	-.0610	-.0220			-.3460		-.5960	-.5650	-.0840	-.0040	.0320
135.000	.0000									-1.1790					
142.000	.0000														
150.000	.0000		.1230	-.0150	.1410	.3460			.0470		-.6210	-.4940	-.0750	.0350	.0330
157.000	.0000							.2350							
162.000	.0000								-.0940						
165.000	.0000										-.6480	-.5680	.1110	-.0110	-.0250
169.000	.0000								.0310						
172.000	.0000						.7210								
180.000	.0000	.8130	.2000	.1810	.2960	.6830			.3730		-.9890	-.5130	-.0930	-.0210	.0190

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0280							-.1000		-.1510
40.000	.0430	-.1150		-.2170	-.2920	-.3900	-.2520			-.1700
70.000		.0150	-.0660	-.1780	-.1820	-.4380	-.2440	-.1170		
90.000		.0380	.0020	-.1350	-.2690	-.4570	-.3440	-.1220		
105.000				-.1380	-.4200	-.4710	-.4420	-.1510		
110.000									-.2690	
120.000		.0410	.1380	-.1100	-.6370	-.5330	-.4710	-.1940	-.2350	
135.000				.5020	-.0320	-.7060	-.5000	-.4700		
150.000		.0400	.1650	.3150	.1800	-.3750	-.4420	-.3720		
165.000		.0190		.2790	.2160	-.3300	-.3750	-.2560		
180.000		.0360	.1480	.2020						

AMES 11-7X7 OA12 OEA ORBITER FUSELAGE (SBFB4*) 31 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.53[illegible] INCHES
LREF = 35.849[illegible] INCHES YMRP = .[illegible] INCHES
BREF = 39.849[illegible] INCHES ZMRP = .[illegible] INCHES
SCALE = .[illegible] SCALE

PARAMETRIC DATA

ALPHA = -4.[illegible] RUDDER = .[illegible]
ELEVON = 15.[illegible] RUDFLP = .[illegible]

MACH (1) = .6[illegible] BETA (1) = -4.91[illegible]

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.[illegible]	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.[illegible]	.[illegible]	.[illegible]	.[illegible]	-.881[illegible]	-.171[illegible]	-.078[illegible]			-.079[illegible]		-.094[illegible]	-.079[illegible]	-.062[illegible]	-.038[illegible]	-.038[illegible]
20.[illegible]	.[illegible]		-.584[illegible]	-.787[illegible]	-.241[illegible]	-.124[illegible]			-.118[illegible]		-.131[illegible]				
40.[illegible]	.[illegible]		-.303[illegible]	-.603[illegible]	-.264[illegible]	-.290[illegible]			-.298[illegible]		-.334[illegible]	-.258[illegible]	-.174[illegible]	-.103[illegible]	-.072[illegible]
55.[illegible]	.[illegible]		-.114[illegible]	-.388[illegible]	-.076[illegible]	-.049[illegible]			-.147[illegible]		-.103[illegible]				
70.[illegible]	.[illegible]		.016[illegible]	-.252[illegible]	.062[illegible]	.038[illegible]			-.101[illegible]		-.105[illegible]	-.327[illegible]	-.041[illegible]	.057[illegible]	.072[illegible]
90.[illegible]	.[illegible]	.757[illegible]	.113[illegible]	-.152[illegible]	.077[illegible]	.047[illegible]			-.011[illegible]		-.108[illegible]	-.360[illegible]	-.056[illegible]	.029[illegible]	.037[illegible]
105.[illegible]	.[illegible]														
110.[illegible]	.[illegible]														
120.[illegible]	.[illegible]		.246[illegible]	.064[illegible]	.194[illegible]	.175[illegible]			-.067[illegible]		-.144[illegible]	-.217[illegible]	-.039[illegible]	.017[illegible]	.025[illegible]
135.[illegible]	.[illegible]														
142.[illegible]	.[illegible]									-.299[illegible]					
150.[illegible]	.[illegible]		.274[illegible]	.173[illegible]	.283[illegible]	.448[illegible]			.034[illegible]		-.394[illegible]	-.140[illegible]	-.051[illegible]	-.015[illegible]	.019[illegible]
157.[illegible]	.[illegible]							.389[illegible]							
162.[illegible]	.[illegible]								-.044[illegible]						
165.[illegible]	.[illegible]										-.328[illegible]	-.127[illegible]	.146[illegible]	-.019[illegible]	.015[illegible]
169.[illegible]	.[illegible]								-.110[illegible]						
172.[illegible]	.[illegible]						.658[illegible]								
180.[illegible]	.[illegible]	.692[illegible]	.141[illegible]	.150[illegible]	.238[illegible]	.554[illegible]			.213[illegible]		-.495[illegible]	-.166[illegible]	-.135[illegible]	-.071[illegible]	-.031[illegible]

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.[illegible]	-.042[illegible]							-.085[illegible]		-.153[illegible]
40.[illegible]	-.083[illegible]	-.155[illegible]		-.138[illegible]	-.142[illegible]	-.076[illegible]	-.169[illegible]			-.149[illegible]
70.[illegible]		-.033[illegible]	-.097[illegible]	-.106[illegible]	-.047[illegible]	-.177[illegible]	-.164[illegible]	-.134[illegible]		
90.[illegible]		-.006[illegible]	-.017[illegible]	-.046[illegible]	-.070[illegible]	-.171[illegible]	-.164[illegible]	-.137[illegible]		
105.[illegible]				.009[illegible]	-.124[illegible]	-.175[illegible]	-.172[illegible]	-.161[illegible]		
110.[illegible]									-.229[illegible]	
120.[illegible]		.019[illegible]	.135[illegible]	.155[illegible]	-.285[illegible]	-.260[illegible]	-.131[illegible]	-.123[illegible]	-.181[illegible]	
135.[illegible]				.4[illegible]	.028[illegible]	-.154[illegible]	-.094[illegible]	-.125[illegible]		
150.[illegible]		.063[illegible]	.138[illegible]	.221[illegible]	-.007[illegible]	-.086[illegible]	-.085[illegible]	-.163[illegible]		
165.[illegible]		.027[illegible]		.213[illegible]	.172[illegible]	-.012[illegible]	-.087[illegible]	-.258[illegible]		
180.[illegible]		-.024[illegible]	.039[illegible]	.089[illegible]						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB43)

MACH (1) = .599 BETA (2) = .0U

SECTION : 1:ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.0850	-.1570	-.0690			-.0690		-.0890	-.0720	-.0470	-.0320	-.0340
20.000	.0000		-.6490	-.7940	-.1870	-.0880			-.0850		-.1040				
40.000	.0000		-.4490	-.6340	-.2120	-.1820			-.1810		-.2230	-.1670	-.0940	-.0530	-.0330
55.000	.0000		-.3140	-.5060	-.1140	-.0740			-.0870		-.1340				
70.000	.0000		-.2080	-.4090	-.0880	-.0360			-.0760		-.1610	-.3710	-.0720	.0260	.0470
90.000	.0000	.5240	-.1250	-.3310	-.0470	-.0540			-.1110		-.1780	-.3980	-.0790	.0000	.0160
105.000	.0000														
110.000	.0000														
120.000	.0000		.0570	-.0950	.0630	.0210			-.2070		-.2030	-.2530	-.0680	-.0170	.0130
135.000	.0000														
142.000	.0000									-.4070					
150.000	.0000		.1820	.1010	.2170	.3450			-.1050		-.3760	-.1510	-.0600	-.0210	.0150
157.000	.0000							.2390							
162.000	.0000								-.1960						
165.000	.0000										-.3720	-.1290	.0110	-.0160	.0150
169.000	.0000								-.1490						
172.000	.0000						.6470								
180.000	.0000	.7250	.1690	.1840	.2700	.5860			.2380		-.4560	-.1250	-.0870	-.0300	.0110

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0420							-.0760		-.1500
40.000	-.0420	-.1150		-.1120	-.1170	-.0490	-.1210			-.1490
70.000		-.0630	-.1510	-.1830	-.1270	-.2400	-.2080	-.1590		
90.000		-.0350	-.0730	-.1440	-.1730	-.2410	-.2120	-.1680		
105.000				-.1430	-.2420	-.2530	-.2230	-.1970		
110.000									-.2640	
120.000		-.0020	.0930	-.0760	-.5190	-.3030	-.2110	-.1920	-.2290	
135.000				.4290	-.0640	-.2840	-.2010	-.1960		
150.000		.0220	.1400	.3120	.0520	-.1910	-.1810	-.2120		
165.000		.0250		.2370	.1710	-.1460	-.1920	-.2050		
180.000		.0220	.1010	.1450						

AMES 11-7X7 OA12 OEA ORBITER FUSELAGE (REF843)

MACH (1) = .597 BETA (3) = 5.270

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3236	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.8860	-.1710	-.0830			-.0830		-.0920	-.0810	-.0560	-.0450	-.0390
20.000	.0000		-.7090	-.8200	-.1690	-.0780			-.0740		-.0970				
40.000	.0000		-.5920	-.6910	-.1840	-.1080			-.1120		-.1620	-.1210	-.0940	-.0480	-.0190
55.000	.0000		-.5140	-.6330	-.1450	-.0920			-.1100		-.1540				
70.000	.0000		-.4440	-.5610	-.1520	-.0920			-.1380		-.2010	-.1660	-.1250	-.0740	-.0270
90.000	.0000	.3210	-.3810	-.4970	-.1560	-.1450			-.1920		-.2400	-.4150	-.0960	-.0150	-.0030
105.000	.0000														
110.000	.0000														
125.000	.0000		-.1640	-.2660	-.0840	-.1310			-.4110		-.2620	-.2870	-.1110	-.0510	-.0150
135.000	.0000														
142.000	.0000									-.6270					
150.000	.0000		.0520	-.0110	.0970	.1910			-.2640		-.3930	-.1790	-.0990	-.0470	-.0190
157.000	.0000							.0170							
162.000	.0000								-.4010						
165.000	.0000										-.3850	-.1460	-.0620	-.0290	-.0140
169.000	.0000								-.2350						
172.000	.0000						.5640								
180.000	.0000	.7050	.1510	.1610	.2420	.5490			.2030		-.4880	-.1460	-.0190	-.0050	-.0020

X/LB	.5973	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0510							-.0770		-.1470
40.000	-.0260	-.0930		-.0930	-.0940	-.0320	-.0890			-.1360
70.000		-.0950	-.1930	-.2570	-.1880	-.2930	-.2390	-.1870		
90.000		-.0600	-.1220	-.2330	-.2410	-.3060	-.2460	-.1950		
105.000				-.2740	-.3450	-.3160	-.2660	-.2260		
110.000									-.2790	
125.000		-.0390	.0190	-.3110	-.7650	-.4060	-.2770	-.2490	-.2660	
135.000				.3760	-.2320	-.4870	-.3490	-.2950		
150.000		-.0030	.0950	.2840	.1660	-.3140	-.2710	-.2580		
169.000		-.0380		.2040	.1280	-.3220	-.2830	-.2090		
180.000		-.0130	.0630	.1030						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB43)

MACH (2) = .897 BETA (1) = -4.98U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.6920	-.4980	-.0590			-.1140		-.1820	-.1450	-.0680	-.0290	-.0110
20.000	.0000		-.2800	-.7460	-.3870	-.1100			-.1470		-.2210				
40.000	.0000		-.0510	-.7760	-.2900	-.3150			-.3620		-.4430	-.4770	-.1560	-.0920	-.0480
55.000	.0000		.0760	-.5240	-.0850	-.0350			-.0760		-.1240				
70.000	.0000		.1590	-.3450	.0130	.0740			-.0190		-.1150	-.6960	.0200	.0730	.0130
90.000	.0000	.0470	.2120	-.1930	.0970	.1010			-.0230		-.1260	-.7910	.0310	.0550	.0210
105.000	.0000														
110.000	.0000														
120.000	.0000		.3120	.0590	.2390	.2640			.0260		-.1540	-.8020	.0240	.0360	.0090
135.000	.0000									-.7220					
142.000	.0000								.2560		-.4860	-.5160	.0010	.0190	.0440
150.000	.0000		.3280	.1850	.3270	.5580		.5510							
157.000	.0000								.1620						
162.000	.0000										-.6850	-.4650	.0360	.0230	.0440
165.000	.0000								.0820						
169.000	.0000						.8120								
172.000	.0000								.3830		-1.1180	-.4830	-.0710	-.0350	-.0160
180.000	.0000	.8160	.1780	.1740	.2870	.6870									
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0270							-.1300		-.1610					
40.000	-.0420	-.2030		-.2250	-.2720	-.0920	-.2500			-.1510					
70.000		.0290	-.0350	-.0640	-.0290	-.2850	-.3890	-.1460							
90.000		.0520	.0450	.0160	-.0690	-.3090	-.3390	-.1280							
105.000				.0840	-.1390	-.3270	-.3210	-.1530							
110.000									-.2830						
120.000		.0600	.1930	.2600	-.3070	-.3150	-.2320	-.1480	-.2200						
135.000				.4880	.0750	-.2180	-.1330	-.1420							
150.000		.0630	.2060	.2910	.0500	-.1020	-.0690	-.1840							
165.000		.0670		.2950	.2240	-.0130	-.0370	-.2760							
180.000		.0170	.1080	.1690											

AMES 11-7U7 OA12 02A ORBITER FUSELAGE (RBPB43)

MACH (2) = .896 BETA (2) = .0U0

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0612	.1355	.1506	.1581	.1732	.1956	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.6160	-.4850	-.0290			-.0810		-.1250	-.1000	-.0410	-.0120	.0060
20.000	.0000		-.3450	-.6910	-.2430	-.0580			-.0980		-.1540				
40.000	.0000		-.1770	-.7630	-.2270	-.1690			-.2200		-.2830	-.2750	-.0640	-.0270	.0050
55.000	.0000		-.0980	-.7760	-.1940	-.0540			-.1240		-.1580				
70.000	.0000		-.0430	-.6360	-.0480	.0020			-.1110		-.1720	-.7100	-.0460	.0560	.0890
90.000	.0000	.6810	.0030	-.4590	-.0160	.0020			-.1420		-.1810	-.7970	-.0180	.0410	.0550
105.000	.0000														
110.000	.0000														
120.000	.0000		.1370	-.1160	.1050	.1300			-.1720		-.1930	-.6720	-.0180	.0220	.0520
135.000	.0000														
142.000	.0000									-1.0810					
150.000	.0000		.2370	.1160	.2610	.4810			.1610		-.6730	-.2450	-.0130	.0190	.0510
157.000	.0000							.4150							
162.000	.0000								.0540						
165.000	.0000										-.8310	-.2520	.0730	.0270	.0490
169.000	.0000								.0730						
172.000	.0000						.7970								
180.000	.0000	.8260	.2100	.2040	.3250	.7140			.3980		-1.1000	-.1760	-.0250	.0110	.0470

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0070							-.1060		-.1280
40.000	.0020	-.1290		-.1880	-.2000	-.0720	-.1780			-.1300
70.000		.0210	-.0530	-.1310	-.1170	-.3770	-.3890	-.1670		
90.000		.0450	.0240	-.0680	-.1820	-.3880	-.4260	-.1480		
105.000				-.0370	-.2810	-.3990	-.4140	-.1710		
110.000									-.2630	
120.000		.0640	.1770	.0660	-.4820	-.4060	-.3600	-.1880	-.2350	
135.000				.5080	.0280	-.3730	-.2940	-.2680		
150.000		.0770	.2080	.3740	.1250	-.2570	-.2070	-.2730		
165.000		.0750		.3160	.2230	-.1690	-.1830	-.2360		
180.000		.0740	.1700	.2260						

AMES 11-7D7 OA12 O2A ORBITER FUSELAGE (RBP943)

MACH (2) = .903 BETA (3) = 5.340

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.6360	-.5330	-.0430			-.0960		-.1850	-.1300	-.0630	-.0210	-.0110
20.000	.0000		-.3860	-.6540	-.5330	-.0370			-.0930		-.1970				
40.000	.0000		-.2880	-.8050	- 2660	-.0880			-.1460		-.2960	-.1940	-.0480	-.0110	.0090
55.000	.0000		-.2530	-.8420	-.0750	-.0700			-.1550		-.3390				
70.000	.0000		-.2180	-.8670	-.0340	-.0570			-.1750		-.4490	-.6570	-.0410	.0440	.0720
90.000	.0000	.5170	-.1870	-.7590	-.0980	-.0910			-.2400		-.4870	-.7860	-.0550	.0320	.0420
105.000	.0000														
110.000	.0000														
125.000	.0000		-.0380	-.3410	-.0550	-.0230			-.3380		-.5930	-.5820	-.0730	-.0010	.0280
135.000	.0000														
142.000	.0000									-1.1770					
150.000	.0000		.1360	-.0140	.1460	.3470			.0530		-.6480	-.5030	-.0650	.0330	.0410
157.000	.0000							.2320							
162.000	.0000								-.0910						
165.000	.0000										-.6750	-.5560	.2310	-.0110	-.0150
169.000	.0000								.0360						
172.000	.0000						.7280								
180.000	.0000	.8270	.2070	.1800	.3000	.6870			.3730		-.9840	-.5170	-.0880	-.0190	.0150

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0220							-.1290		-.1570
40.000	.0150	-.1060		-.1850	-.2100	-.0750	-.1860			-.1570
70.000		.0170	-.0670	-.1770	-.1810	-.4480	-.5670	-.2370		
90.000		.0370	.0000	-.1320	-.2680	-.4580	-.5200	-.2740		
105.000				-.1330	-.4170	-.4700	-.5080	-.3270		
110.000									-.2560	
125.000		.0420	.1350	-.1080	-.6340	-.5330	-.4820	-.4940	-.2390	
135.000				.5010	-.0340	-.7050	-.5020	-.4890		
150.000		.0380	.1620	.3140	.1730	-.3810	-.4530	-.3710		
165.000		.0180		.2770	.2100	-.3400	-.3850	-.2500		
180.000		.0330	.1400	.1970						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 OBA ORBITER FUSELAGE (RBPB44) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = -4.000 RUDDER = .000
ELEVON = -10.000 RUDFLR = .000

MACH (1) = .597 BETA (1) = -4.910

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.0860	-.1690	-.0840			-.0920		-.0980	-.0890	-.0630	-.0570	-.0620
20.000	.0000		-.5860	-.7930	-.2410	-.1250			-.1250		-.1320				
40.000	.0000		-.3060	-.6030	-.2550	-.3110			-.3170		-.3390	-.2750	-.1810	-.1280	-.0930
55.000	.0000		-.1120	-.3970	-.0890	-.0530			-.0560		-.0990				
70.000	.0000		.0070	-.2530	-.0010	.0340			-.0110		-.1010	-.3290	-.0330	.0330	.0880
90.000	.0000	.7090	.1080	-.1500	.1680	.0490			-.0160		-.1150	-.3580	-.0420	.0330	.0560
105.000	.0000														
110.000	.0000														
120.000	.0000		.2450	.0660	.1960	.1720			-.0120		-.1450	-.2110	-.0410	.0130	.0510
135.000	.0000									-.2920					
142.000	.0000								.0320		-.3950	-.1320	-.0490	-.0030	.0320
150.000	.0000		.2740	.1790	.2780	.4500		.3930							
157.000	.0000								-.0500						
162.000	.0000										-.3360	-.1200	-.0060	-.0020	.0300
165.000	.0000								-.1050						
169.000	.0000						.6620								
172.000	.0000														
180.000	.0000	.6930	.1390	.1590	.2370	.5550			.2150		-.4950	-.1520	-.1390	-.0570	-.0180

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0890							-.1740		-.1630
40.000	-.1320	-.2320		-.2920	-.3360	-.4110	-.2130			-.1590
70.000		.0240	.0200	.0630	.1580	.1500	.1220	.0160		
90.000		.0530	.0850	.1010	.1260	.0820	.0520	-.0220		
105.000				.1380	.0640	.0430	.0160	-.0510		
110.000									-.1530	
120.000		.0660	.2030	.2660	-.0940	-.0260	.0110	-.0240	-.1180	
135.000				.4380	.0940	-.0580	-.0130	-.0610		
150.000		.0670	.1900	.2510	.0410	-.0240	-.0220	-.1080		
165.000		.0730		.2530	.2160	.0420	-.0250	-.1450		
180.000		.0160	.0880	.1330						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB44)

MACH (1) = .597 BETA (2) = .080

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.9040	-.1620	-.0810			-.0880		-.0880	-.0740	-.0490	-.0520	-.0560
20.000	.0000		-.6610	-.8130	-.1940	-.0980			-.1010		-.1130				
40.000	.0000		-.4550	-.6520	-.2150	-.1070			-.1980		-.2360	-.1730	-.0950	-.0710	-.0610
55.000	.0000		-.3190	-.5220	-.1310	-.0790			-.0970		-.1330				
70.000	.0000		-.2240	-.4150	-.0950	-.0390			-.0860		-.1610	-.3550	-.0560	.0220	.0610
90.000	.0000	.5210	-.1440	-.3370	-.0590	-.0570			-.1190		-.1810	-.3890	-.0660	.0020	.0370
105.000	.0000														
110.000	.0000														
120.000	.0000		.0500	-.0970	.0600	.0240			-.2220		-.2050	-.2420	-.0770	-.0180	.0270
135.000	.0000														
142.000	.0000									-.3990					
150.000	.0000		.1830	.1050	.2140	.3430			-.1070		-.3700	-.1460	-.0670	-.0170	.0210
157.000	.0000							.2410							
162.000	.0000								-.1950						
165.000	.0000										-.3620	-.1140	-.0410	-.0110	.0190
169.000	.0000								-.1420						
172.000	.0000						.6520								
180.000	.0000	.7330	.1720	.1830	.2700	.5880			.2450		-.4480	-.1040	-.0870	-.0220	.0260

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0810							-.1640		-.1550
40.000	-.0890	-.1890		-.2670	-.3120	-.4090	-.2460			-.1530
70.000		-.0070	-.0240	-.0080	.0930	.0990	.0880	-.0070		
90.000		.0230	.0300	.0120	.0460	.0340	.0190	-.0430		
105.000				.0050	-.0390	-.0160	-.0180	-.0740		
110.000									-.1670	
120.000		.0440	.1580	.0450	-.2910	-.1000	-.0380	-.0570	-.1340	
135.000				.4700	.0200	-.1590	-.0820	-.1080		
150.000		.0620	.1910	.3400	.1020	-.1260	-.1100	-.1530		
165.000		.0650		.2760	.2140	-.0830	-.1240	-.1510		
180.000		.0640	.1500	.1870						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBFB44)

MACH (1) = .597 BETA (3) = 5.270

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.0880	-.1650	-.0800			-.0850		-.0970	-.0840	-.0580	-.0500	-.0560
20.000	.0000		-.7030	-.8110	-.1670	-.0770			-.0770		-.0960				
40.000	.0000		-.5900	-.6870	-.1810	-.1100			-.1170		-.1590	-.1220	-.0580	-.0480	-.0310
55.000	.0000		-.5110	-.6270	-.1510	-.0900			-.1100		-.1540				
70.000	.0000		-.4490	-.5560	-.1550	-.0930			-.1340		-.1980	-.3860	-.0830	.0080	.0460
90.000	.0000	.3240	-.3830	-.4980	-.1550	-.1410			-.1960		-.2370	-.4100	-.0910	-.0050	.0220
105.000	.0000														
110.000	.0000														
120.000	.0000		-.1590	-.2700	-.0840	-.1260			-.4060		-.2620	-.2820	-.1050	-.0390	.0010
135.000	.0000														
142.000	.0000									-.6130					
150.000	.0000		.0580	-.0060	.1010	.1970			-.2580		-.3870	-.1760	-.0970	-.0420	.0110
157.000	.0000							.0210							
162.000	.0000								-.3930						
165.000	.0000										-.3790	-.1380	-.0860	-.0510	-.0390
169.000	.0000								-.2230						
172.000	.0000						.5640								
180.000	.0000	.7090	.1660	.1670	.2500	.5540			.2070		-.4790	-.1460	-.1070	-.0500	-.0040

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0830							-.1710		-.1510
40.000	-.0540	-.1540		-.2340	-.2820	-.4020	-.2610			-.1460
70.000		-.0280	-.0670	-.0690	.0400	.0560	.0530	-.0220		
90.000		.0040	-.0100	-.0520	-.0100	.0020	-.0020	-.0500		
105.000				-.1030	-.1290	-.0590	-.0460	-.0840		
110.000									-.1720	
120.000		.0140	.0980	-.1580	-.4850	-.1660	-.0810	-.0840	-.1510	
135.000				.4280	-.1140	-.3180	-.1840	-.1690		
150.000		.0400	.1470	.3170	.1490	-.2220	-.1850	-.1800		
165.000		.0020		.2490	.1700	-.2440	-.2140	-.1360		
180.000		.0300	.1120	.1510						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7ft OA12 OBA ORBITER FUSELAGE (RBPB44)

MACH (2) = .903 BETA (1) = -4.980

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.6400	-.5090	-.0510			-.1060		-.1800	-.1450	-.0600	-.0270	-.0070
20.000	.0000		-.2760	-.7310	-.4160	-.1010			-.1340		-.2140				
40.000	.0000		-.0490	-.7710	-.2930	-.3080			-.3500		-.4500	-.4750	-.1500	-.0870	-.0340
55.000	.0000		.0770	-.5220	-.0720	-.0290			-.0700		-.1250				
70.000	.0000		.1580	-.3460	.0230	.0740			-.0160		-.1150	-.6870	.0170	.0780	.1120
90.000	.0000	.8460	.2190	-.1920	.1040	.1040			-.0210		-.1190	-.7810	.0020	.0620	.0790
105.000	.0000														
110.000	.0000														
125.000	.0000		.3150	.0610	.2400	.2680			.0240		-.1450	-.7930	.0310	.0430	.0700
135.000	.0000									-.7250					
142.000	.0000								.2600		-.4740	-.5100	.0050	.0270	.0560
150.000	.0000		.3280	.1860	.3290	.5740		.5550							
157.000	.0000								.1680						
162.000	.0000										-.6840	-.4600	.0390	.0300	.0580
165.000	.0000								.0860						
169.000	.0000						.8180								
172.000	.0000								.3850		-1.1080	-.5180	-.0640	-.0290	.0090
180.000	.0000	.8100	.1800	.1780	.2860	.6920									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0210							-.5980		-.1350
40.000	-.0380	-.2040		-.2530	-.3180	-.4560	-.5330			-.1580
70.000		.0510	.0160	.0500	.1620	.1850	.1600	.0020		
90.000		.0730	.0910	.1050	.1130	.1150	.0960	-.0010		
105.000				.1480	.0420	.0630	.0590	-.0270		
110.000									-.2070	
120.000		.0820	.2260	.3130	-.1490	-.0110	.0470	-.0100	-.1590	
135.000				.5140	.1320	-.0380	.0290	-.0440		
150.000		.0840	.2340	.3160	.0900	.0100	.0310	-.1040		
165.000		.0890		.3230	.2620	.0830	.0410	-.1970		
180.000		.0350	.1330	.1990						

AMES 11-7D7 OA12 O2A ORBITER FUSELAGE (RBPB44)

MACH (2) = .902 BETA (2) = .0D0

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0183	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3206	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.6110	-.5150	-.0340			-.0900		-.1420	-.1270	-.0530	-.0170	.0020
25.000	.0000		-.3420	-.6940	-.4730	-.0650			-.1080		-.1730				
40.000	.0000		-.1750	-.8080	-.2270	-.1790			-.2310		-.2980	-.3270	-.0710	-.0350	-.0030
55.000	.0000		-.0960	-.7850	-.0930	-.0610			-.1320		-.1670				
75.000	.0000		-.0410	-.6670	-.0510	-.0050			-.1150		-.1840	-.7150	-.0120	.0500	.0860
90.000	.0000	.6870	.0060	-.4930	-.0210	-.0020			-.1450		-.2290	-.7950	-.0260	.0370	.0570
105.000	.0000														
110.000	.0000														
120.000	.0000		.1350	-.1340	.0990	.1330			-.1710		-.3010	-.6990	-.0150	.0180	.0520
135.000	.0000														
142.000	.0000									-1.0680					
150.000	.0000		.2320	.1090	.2560	.4840			.1670		-.6950	-.3540	-.0190	.0170	.0510
157.000	.0000							.4180							
162.000	.0000								.0570						
165.000	.0000										-.8500	-.3610	.0840	.0280	.0520
169.000	.0000								.0760						
172.000	.0000						.8010								
180.000	.0000	.8280	.2080	.1970	.3190	.7100			.4030		-1.0920	-.2690	-.0120	.0110	.0490

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0150							-.6000		-.1260
40.000	-.0030	-.1420		-.2310	-.3060	-.4330	-.5960			-.1500
70.000		.0270	-.0240	-.0550	.0510	.1120	.1090	-.0340		
90.000		.0520	.0470	-.0150	-.0190	.0370	.0430	-.0390		
105.000				.0020	-.1310	-.0150	.0090	-.0650		
110.000									-.2250	
120.000		.0680	.1930	.0920	-.4270	-.1030	-.0180	-.0630	-.1880	
135.000				.5170	.0630	-.1840	-.0790	-.1170		
150.000		.0850	.2270	.3880	.1610	-.1400	-.0950	-.1770		
165.000		.0840		.3350	.2550	-.0820	-.0960	-.1950		
180.000		.0850	.1890	.2470						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 02A ORBITER FUSELAGE (RBPB44)

MACH (2) = .904 BETA (3) = 5.340

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0189	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.6420	-.5370	-.0500			-.1040		-.1860	-.1460	-.0610	-.0260	-.0090
20.000	.0000		-.3851	-.6810	-.5240	-.0420			-.1940		-.1940				
40.000	.0000		-.2880	-.8290	-.2620	-.0910			-.1470		-.2900	-.2070	-.0420	-.0170	.0090
55.000	.0000		-.2520	-.8680	-.0770	-.0700			-.1550		-.3380				
70.000	.0000		-.2170	-.8740	-.0370	-.0530			-.1800		-.4440	-.7390	-.0370	.0400	.0790
90.000	.0000	.5210	-.1620	-.7575	-.0960	-.0860			-.2430		-.4940	-.7860	-.0530	.0290	.0510
105.000	.0000														
110.000	.0000								-.3410		-.5940	-.5900	-.0720	.0000	.0330
120.000	.0000		-.0370	-.3370	-.0590	-.0210									
135.000	.0000									-1.1760					
142.000	.0000								.0540		-.6680	-.4820	-.0570	.0320	.0390
150.000	.0000		.1280	-.0150	.1430	.3490		.2370							
157.000	.0000								-.0880						
162.000	.0000										-.7360	-.5260	.2310	-.0080	-.0090
165.000	.0000								.0360						
169.000	.0000						.7280								
172.000	.0000								.3790		-1.0260	-.4990	-.0820	-.0140	.0180
180.000	.0000	.8260	.2030	.1790	.2950	.6890									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0240							-.5750		-.1320
40.000	.0060	-.1200		-.2350	-.2900	-.4150	-.6310			-.1470
70.000		.0190	-.0530	-.1500	-.0830	.0340	.0600	-.0650		
90.000		.0410	.0120	-.1170	-.1920	-.0350	.0000	-.0690		
105.000				-.1270	-.3500	-.0880	-.0400	-.0930		
110.000									-.2380	
120.000		.0500	.1490	-.1050	-.6290	-.2000	-.0890	-.1180	-.2150	
135.000				.5040	-.0240	-.7030	-.2120	-.2130		
150.000		.0550	.1760	.3220	.1920	-.3670	-.2370	-.2330		
165.000		.0330		.2900	.2250	-.3200	-.3260	-.1930		
180.000		.0490	.1580	.2160						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB45) (01 MAY 73)

REFERENCE DATA

SREF = 2.421U SQ.FT. XMRP = 28.53UU INCHES
LREF = 39.849U INCHES YMRP = .UUUU INCHES
BREF = 39.849U INCHES ZMRP = .UUUU INCHES
SCALE = .U3UU SCALE

PARAMETRIC DATA

ALPHA = -4.UUU RUDDER = .UUU
ELEVON = .UUU RUDFLR = .UUU

MACH (1) = .6U1 BETA (1) = -4.91U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.UUUU	.UU75	.U188	.U339	.U602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.UUU	.UUUU	.UUUU	.UUUU	-.89UU	-.17UU	-.U83U			-.U91U		-.1UUU	-.U89U	-.U66U	-.U53U	-.U54U
2U.UUU	.UUUU		-.597U	-.79U	-.236U	-.123U			-.126U		-.132U				
4U.UUU	.UUUU		-.296U	-.6UU	-.256U	-.3U1U			-.3U6U		-.335U	-.27UU	-.179U	-.121U	-.U84U
55.UUU	.UUUU		-.1U9U	-.39UU	-.U84U	-.U51U			-.U51U		-.U98U				
7U.UUU	.UUUU		.UU8U	-.25UU	-.U83U	.U37U			-.U69U		-.1U4U	-.331U	-.U41U	.U49U	.U73U
9U.UUU	.UUUU	.7U6U	.1U9U	-.144U	.U72U	.U5UU			-.U1UU		-.121U	-.362U	-.U5UU	.U28U	.U46U
1U5.UUU	.UUUU														
11U.UUU	.UUUU														
12U.UUU	.UUUU		.245U	.U67U	.192U	.173U			-.U12U		-.154U	-.219U	-.U46U	.U1UU	.U37U
135.UUU	.UUUU														
142.UUU	.UUUU									-.298U					
15U.UUU	.UUUU		.278U	.177U	.278U	.448U			.U31U		-.4U3U	-.138U	-.U55U	-.U12U	.U2UU
157.UUU	.UUUU							.395U							
162.UUU	.UUUU								-.U49U						
165.UUU	.UUUU										-.337U	-.129U	-.272U	-.U1UU	.U19U
169.UUU	.UUUU								-.1U8U						
172.UUU	.UUUU						.661U								
18U.UUU	.UUUU	.694U	.136U	.155U	.233U	.554U			.213U		-.5U4U	-.162U	-.143U	-.U79U	-.U28U

X/LB	.5873	.6626	.738U	.7869	.8283	.8848	.9262	.9639	1.UU15	1.U392
PHI										
.UUU	-.U71U							-.127U		-.159U
4U.UUU	-.1U7U	-.189U		-.223U	-.24UU	-.238U	-.157U			-.155U
7U.UUU		-.UU8U	-.U4UU	-.U25U	.U54U	.UU2U	-.UU2U	-.U48U		
9U.UUU		.U2UU	.U28U	.U26U	.U25U	-.U38U	-.U42U	-.U72U		
1U5.UUU				.U69U	-.U31U	-.U66U	-.U69U	-.1U2U		
11U.UUU									-.184U	
12U.UUU		.U43U	.167U	.2U8U	-.19UU	-.1U7U	-.U52U	-.U67U	-.143U	
135.UUU				.424U	.U61U	-.1U6U	-.U47U	-.U92U		
15U.UUU		.U45U	.166U	.236U	.U18U	-.U54U	-.U51U	-.131U		
165.UUU		.U49U		.234U	.193U	.U18U	-.U52U	-.181U		
18U.UUU		-.UU8U	.U65U	.1U3U						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB45)

MACH (1) = .997 BETA (2) = .090

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.6880	-.1490	-.0720			-.0750		-.0880	-.0700	-.0490	-.0400	-.0410
000	.0000		-.6340	-.7940	-.1820	-.0880			-.0870		-.1040				
.000	.0000		-.4460	-.6380	-.2050	-.1770			-.1040		-.2240	-.1680	-.0920	-.0650	-.0410
55.000	.0000		-.3090	-.5050	-.1200	-.0750			-.0870		-.1290				
70.000	.0000		-.2160	-.4070	-.0840	-.0350			-.0770		-.1550	-.3670	-.0600	.0250	.0530
90.000	.0000	.5250	-.1330	-.3240	-.0490	-.0500			-.1130		-.1810	-.3920	-.0710	.0050	.0270
105.000	.0000														
110.000	.0000														
120.000	.0000		.0540	-.0900	.0660	.0270			-.2070		-.2050	-.2450	-.0730	-.0110	.0230
135.000	.0000									-.4010					
142.000	.0000														
150.000	.0000		.1820	.1090	.2090	.3440			-.1070		-.3770	-.1450	-.0620	-.0160	.0160
157.000	.0000							.2390							
162.000	.0000								-.1940						
165.000	.0000										-.3650	-.1200	-.4310	-.0110	.0180
169.000	.0000								-.1420						
172.000	.0000						.6460								
180.000	.0000	.8230	.1740	.1890	.2650	.5840			.2390		-.4500	-.1160	-.0870	-.0220	.0160

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0800							-.1170		-.1480
40.000	-.0630	-.1490		-.1890	-.2110	-.2180	-.1540			-.1470
70.000		-.0370	-.0880	-.0930	-.0160	-.0530	-.0420	-.0710		
90.000		-.0090	-.0220	-.0680	-.0580	-.0980	-.0650	-.0930		
105.000				-.0680	-.1360	-.1280	-.1090	-.1300		
110.000									-.2080	
120.000		.0210	.1240	-.0130	-.3990	-.1920	-.1110	-.1160	-.1740	
135.000				.4520	-.0230	-.2180	-.1360	-.1470		
150.000		.0440	.1650	.3290	.0810	-.1570	-.1430	-.1780		
165.000		.0460		.2560	.1920	-.1180	-.1550	-.1750		
180.000		.0450	.1250	.1640						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB45)

MACH (1) = .598 BETA (3) = 5.280

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3993	.5120
PHI															
.000	.0000	.0000	.0000	-.0880	-.1670	-.0790			-.0830		-.0960	-.0790	-.0590	-.0490	-.0490
20.000	.0000		-.7040	-.0150	-.1670	-.0730			-.0780		-.1000				
40.000	.0000		-.5860	-.6870	-.1810	-.1020			-.1130		-.1620	-.1180	-.0620	-.0420	-.0250
55.000	.0000		-.5170	-.6290	-.1480	-.0940			-.1130		-.1550				
75.000	.0000		-.4480	-.5590	-.1510	-.0950			-.1340		-.2000	-.3800	-.0850	.0050	.0320
90.000	.0000	.3290	-.3830	-.5030	-.1560	-.1410			-.1980		-.2370	-.4010	-.0930	-.0280	.0120
105.000	.0000														
110.000	.0000														
120.000	.0000		-.1640	-.2740	-.0840	-.1290			-.4050		-.2660	-.2840	-.1150	-.0440	-.0170
135.000	.0000									-.6120					
142.000	.0000														
150.000	.0000		.0515	-.0110	.0990	.1940			-.2610		-.3850	-.1810	-.1160	-.0450	-.0220
157.000	.0000							.0180							
162.000	.0000								-.3890						
165.000	.0000										-.3830	-.1390	-.0610	-.0620	-.0470
169.000	.0000								-.2310						
172.000	.0000						.5600								
180.000	.0000	.5650	.1550	.1600	.2440	.5490			.2660		-.4790	-.1430	-.1160	-.0540	-.0200

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0650							-.1270		-.1530
40.000	-.0390	-.1190		-.1670	-.1900	-.2080	-.1490			-.1560
75.000		-.0620	-.1340	-.1630	-.0800	-.1030	-.0810	-.0960		
90.000		-.0290	-.0720	-.1440	-.1290	-.1450	-.1250	-.1210		
105.000				-.1930	-.2390	-.1880	-.1520	-.1510		
110.000									-.1940	
120.000		-.0100	.0570	-.2380	-.6290	-.2830	-.1760	-.1620	-.2090	
135.000				.4030	-.1780	-.4020	-.2690	-.2280		
150.000		.0210	.1190	.3040	.1220	-.2680	-.2320	-.2170		
165.000		-.0250		.2270	.1450	-.2810	-.2540	-.1710		
180.000		.0070	.0850	.1310						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB4S)

MACH (2) = .901 BETA (1) = -5.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1508	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.6470	-.5200	-.0560			-.1060		-.1790	-.1400	-.0620	-.0260	-.0090
25.000	.0000		-.2680	-.7480	-.4350	-.1070			-.1360		-.2140				
40.000	.0000		-.0560	-.7840	-.3060	-.3060			-.3510		-.4290	-.4620	-.1510	-.0900	-.0390
55.000	.0000		.0650	-.5290	-.0760	-.0340			-.0710		-.1240				
70.000	.0000		.1550	-.3500	.0210	.0750			-.0170		-.1110	-.6700	.0160	.0760	.1060
90.000	.0000	.8370	.2130	-.1940	.0980	.1050			-.0220		-.1190	-.7600	.0110	.0570	.0710
105.000	.0000														
115.000	.0000								.0190		-.1460	-.7730	.0270	.0430	.0690
120.000	.0000		.3120	.0590	.2420	.2650									
135.000	.0000									-.7060					
142.000	.0000								.2570		-.4660	-.4980	.0020	.0240	.0490
150.000	.0000		.3250	.1840	.3280	.5690		.5540							
157.000	.0000								.1660						
162.000	.0000										-.6510	-.4400	.3970	.0270	.0470
165.000	.0000								.0830						
169.000	.0000						.8140								
172.000	.0000								.3830		-1.0730	-.4670	-.0740	-.0290	.0020
180.000	.0000	.7970	.1810	.1690	.2850	.6880									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0240							-.0960		-.1390
40.000	-.0430	-.2070		-.2450	-.3250	-.4640	-.2150			-.1550
70.000		.0350	-.0260	-.0430	.0120	-.0470	.0120	-.0220		
90.000		.0580	.0530	.0330	-.0300	-.0860	-.0270	-.0290		
105.000				.0980	-.1060	-.1160	-.0460	-.0550		
115.000									-.2240	
120.000		.0690	.2000	.2680	-.2840	-.1560	-.0370	-.0420	-.1630	
135.000				.4970	.0920	-.1290	-.0290	-.0710		
150.000		.0710	.2090	.3010	.0620	-.0490	-.0110	-.1370		
165.000		.0730		.3040	.2390	.0310	-.0010	-.2330		
180.000		.0260	.1200	.1810						

AMES 11-7D7 OA12 OBA ORBITER FUSELAGE (RBFB45)

MACH (2) = .902 BETA (2) = .090

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.0000	.0000	.0000	-.6140	-.5170	-.0320			-.0920		-.1550	-.1330	-.0580	-.0200	-.0040
20.000	.0000		-.3330	-.6980	-.4660	-.0650			-.1100		-.1790				
40.000	.0000		-.1710	-.8090	-.2330	-.1770			-.2320		-.2980	-.3260	-.0730	-.0350	-.0050
55.000	.0000		-.0900	-.7830	-.0960	-.0580			-.1270		-.1670				
70.000	.0000		-.0440	-.6630	-.0520	-.0020			-.1160		-.1900	-.7060	-.0180	.0510	.0810
90.000	.0000	.6860	-.0010	-.4840	-.0180	-.0020			-.1450		-.2350	-.7830	-.0320	.0370	.0490
105.000	.0000														
110.000	.0000														
125.000	.0000		.1330	-.1350	.1030	.1280			-.1670		-.3260	-.6940	-.0120	.0260	.0470
135.000	.0000														
142.000	.0000									-1.0610					
150.000	.0000		.2330	.0970	.2540	.4800			.1670		-.6880	-.3480	-.0150	.0150	.0450
157.000	.0000							.4240							
162.000	.0000								.0600						
165.000	.0000										-.8370	-.3740	.2460	.0290	.0460
169.000	.0000								.0790						
172.000	.0000						.7990								
180.000	.0000	.8300	.2040	.1940	.3160	.7150			.4000		-1.0790	-.3020	-.0130	.0080	.0440

X/LB	.5875	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0130							-.0900		-.1330
40.000	-.0050	-.1430		-.2240	-.3040	-.4370	-.2400			-.1560
70.000		.0180	-.0540	-.1270	-.1100	-.2400	-.0570	-.0590		
90.000		.0400	.0240	-.0640	-.1770	-.3240	-.0980	-.0680		
105.000				-.0330	-.2780	-.3680	-.1240	-.0970		
110.000									-.2330	
125.000		.0610	.1780	.0710	-.4740	-.4140	-.1390	-.1130	-.1960	
135.000				.5010	.0350	-.4240	-.2010	-.1750		
150.000		.0750	.2090	.3750	.1300	-.2640	-.1730	-.2190		
165.000		.0740		.3200	.2280	-.1640	-.1650	-.2230		
180.000		.0690	.1730	.2290						

AMES 11-7U7 OA12 OPA ORBITER FUSELAGE (RBPB45)

MACH (2) = .900 BETA (3) = 5.350

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.0000	.0000	.0000	-.6415	-.5250	-.0450			-.1030		-.1720	-.1310	-.0580	-.0290	-.0090
20.000	.0000		-.3840	-.6670	-.5250	-.0410			-.0910		-.1730				
40.000	.0000		-.2890	-.8130	-.2590	-.0910			-.1470		-.2790	-.1940	-.0450	-.0150	.0120
55.000	.0000		-.2540	-.8360	-.0850	-.0720			-.1590		-.3290				
70.000	.0000		-.2240	-.8680	-.0480	-.0580			-.1810		-.4420	-.6670	-.0370	.0400	.0760
90.000	.0000	.5160	-.1920	-.7660	-.1000	-.0890			-.2420		-.4910	-.7400	-.0510	.0280	.0450
105.000	.0000														
110.000	.0000														
120.000	.0000		-.0410	-.3430	-.0610	-.0200			-.3400		-.5870	-.4950	-.0740	-.0460	.0290
135.000	.0000														
142.000	.0000									-1.1800					
150.000	.0000		.1230	-.0100	.1400	.3470			.0470		-.6620	-.4670	-.0540	.0270	.0340
157.000	.0000							.2310							
162.000	.0000								-.0950						
165.000	.0000										-.7750	-.5210	.1320	-.0150	-.0130
169.000	.0000								.0320						
172.000	.0000						.7230								
180.000	.0000	.8110	.1960	.1850	.2930	.6830			.3710		-1.0260	-.4800	-.0870	-.0210	.0110

X/LB	.5873	.6626	.7380	.7869	.8283	.8633	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0270							-.0950		-.1400
40.000	.0030	-.1130		-.2210	-.2940	-.4090	-.2070			-.1550
70.000		.0120	-.0660	-.1770	-.1820	-.4370	-.1990	-.0870		
90.000		.0360	.0040	-.1360	-.2670	-.4610	-.2630	-.1010		
105.000				-.1370	-.4160	-.4690	-.3650	-.1400		
110.000									-.2360	
120.000		.0430	.1370	-.1120	-.6370	-.5390	-.4700	-.1730	-.2080	
135.000				.4960	-.0340	-.7110	-.4980	-.4590		
150.000		.0430	.1640	.3120	.1750	-.3770	-.4470	-.3430		
165.000		.0210		.2780	.2150	-.3350	-.3740	-.2200		
180.000		.0370	.1460	.2040						

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE (RBPB46) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

BETA = .000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

MACH (1) = .60 ALPHA (2) = -15.85

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-1.3680	-.2620	-.1430			-.1350		-.1390	-.1140	-.1060	-.1350	-.1680
20.000	.0000		-1.3400	-1.3560	-.3370	-.2090			-.1750		-.1530				
40.000	.0000		-1.0310	-1.1210	-.5390	-.5170			-.4840		-.4440	-.3530	-.2640	-.3020	-.2550
55.000	.0000		-.7830	-.9090	-.4890	-.4650			-.3760		-.3410				
70.000	.0000		-.5360	-.7410	-.3840	-.2480			-.2460		-.2760	-.3770	-.1410	.1280	.1910
90.000	.0000	.3140	-.2680	-.5350	-.3400	-.3190			-.3230		-.2990	-.4110	-.1390	.0150	.1650
105.000	.0000														
110.000	.0000														
125.000	.0000		.2040	-.0390	-.0370	-.1630			-.4400		-.1810	-.2510	-.1220	-.1[illegible]	.0640
135.000	.0000														
142.000	.0000									-.2720					
150.000	.0000		.5480	.3790	.3660	.3890			.0570		-.1440	-.0360	.0120	.0630	.1240
157.000	.0000							.3290							
162.000	.0000								.1170						
165.000	.0000										-.1360	.0340	-.0340	.0980	.1240
169.000	.0000								.2430						
172.000	.0000						.7870								
180.000	.0000	.9370	.6480	.5340	.5280	.7390			.5450		-.1670	.0380	.0560	.1060	.1590

X/LB	.5873	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.2290							-.1480		-.1520
40.000	-.3300	-.4940		-.3480	-.3420	-.3630	-.3110			-.1360
70.000		.1490	.0680	-.0240	.0320	-.0590	-.0690	-.1090		
90.000		.1980	.1340	.0360	.0210	-.0470	-.0640	-.0970		
105.000				-.0260	-.0990	-.0860	-.0680	-.1280		
110.000									-.2480	
120.000		.1510	.2140	-.1240	-.4840	-.1970	-.1390	-.1650	-.2380	
135.000				.5130	.0310	-.2480	-.1910	-.2070		
150.000		.1880	.2520	.5260	.2890	-.0320	-.0720	-.1460		
165.000		.1840		.4060	.3570	.0230	-.0710	-.1920		
180.000		.2020	.2750	.3170						

AMES 11-7D7 OA12 OBA ORBITER FUSELAGE (RBFB46)

MACH (1) = .999 ALPHA (2) = -10.49D

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3209	.3953	.5125
PHI															
.000	.0000	.0000	.0000	-1.1810	-.2210	-.1160			-.1160		-.1190	-.0870	-.0720	-.0620	-.1090
25.000	.0000		-1.0210	-1.0950	-.2760	-.1510			-.1510		-.1510				
45.000	.0000		-.7630	-.8900	-.3780	-.3610			-.3590		-.3810	-.2850	-.1750	-.1480	-.1720
55.000	.0000		-.5640	-.7170	-.2910	-.2570			-.2260		-.2280				
75.000	.0000		-.3790	-.5710	-.2210	-.1360			-.1630		-.2160	-.3640	-.0410	.0780	.1440
90.000	.0000	.4210	-.1940	-.4260	-.1780	-.1810			-.2150		-.2270	-.3940	-.0540	.0120	.0970
105.000	.0000														
115.000	.0000														
125.000	.0000		.1540	-.0610	.0220	-.0680			-.3370		-.1690	-.2330	-.0680	-.0230	.0470
135.000	.0000														
142.000	.0000									-.3340					
150.000	.0000		.3950	.2550	.2930	.3660			-.0190		-.2390	-.1090	-.0250	.0220	.0680
157.000	.0000							.2820							
162.000	.0000								-.0300						
165.000	.0000										-.2470	-.1490	-.0650	.0380	.0640
169.000	.0000								.0760						
172.000	.0000						.7230								
180.000	.0000	.9010	.4480	.3760	.4060	.6640			.4110		-.2890	-.1420	-.0150	.0330	.0840

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.1440							-.1360		-.1520
40.000	-.2115	-.3180		-.2710	-.2820	-.2650	-.2020			-.1970
75.000		.0810	.0050	-.0430	.0200	-.0390	-.0480	-.0770		
90.000		.1110	.0620	-.0080	-.0180	-.0700	-.0780	-.0820		
105.000				-.0530	-.1270	-.1090	-.1030	-.1240		
115.000									-.2110	
125.000		.0890	.1730	-.0900	-.4670	-.2000	-.1260	-.1390	-.2120	
135.000				.4900	.0070	-.2300	-.1630	-.1770		
150.000		.1150	.2310	.4450	.1880	-.0980	-.1130	-.1620		
165.000		.1140		.3420	.2870	-.0480	-.1190	-.1850		
180.000		.1240	.2020	.2440						

AMES 11-707 OA12 O2A ORBITER FUSELAGE (RBPB46)

MACH (1) = .900 ALPHA (3) = -5.200

SECTION (1:ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0444	.0675	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2292	.2711	.3240	.3953	.5125
PHI															
.000	.0444	.0000	.0000	-.9500	-.1740	-.0850			-.0870		-.0940	-.0760	-.0580	-.0520	-.0390
25.000	.0444		-.7190	-.8580	-.2030	-.1010			-.1050		-.1160				
40.000	.0444		-.9080	-.6890	-.2440	-.2110			-.2130		-.2560	-.1940	-.1150	-.0780	-.0640
55.000	.0444		-.3670	-.5510	-.1520	-.1060			-.1110		-.1480				
75.000	.0444		-.2580	-.4480	-.1120	-.0520			-.0990		-.1710	-.3650	-.0610	.0320	.0690
90.000	.0444	.9020	-.1540	-.3460	-.0750	-.0620			-.1320		-.1950	-.3880	-.0780	.0080	.0410
105.000	.0444														
110.000	.0444														
120.000	.0444		.0680	-.0940	.0540	.0070			-.2440		-.2080	-.2470	-.0760	-.0140	.0270
135.000	.0444														
142.000	.0444									-.3950					
150.000	.0444		.2270	.1340	.2200	.3470			-.0900		-.3480	-.1340	-.0610	-.0140	.0250
157.000	.0444							.2370							
162.000	.0444								-.1660						
165.000	.0444										-.3670	-.1110	-.0860	-.0060	.0120
169.000	.0444								-.1030						
172.000	.0444						.6620								
180.000	.0444	.7040	.2330	.2270	.2940	.6000			.2760		-.3900	-.1030	-.0650	-.0130	.0300

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0800							-.1220		-.1480
40.000	-.0880	-.1780		-.2040	-.2310	-.2260	-.1600			-.1660
75.000		-.0130	-.0740	-.0650	-.0120	-.0560	-.0480	-.0780		
90.000		.0200	-.0080	-.0580	-.0590	-.0950	-.0680	-.0990		
105.000				-.0720	-.1450	-.1300	-.1130	-.1320		
110.000									-.2180	
120.000		.0370	.1330	-.0410	-.4290	-.2030	-.1165	-.1240	-.1910	
135.000				.4550	-.0150	-.2260	-.1490	-.1530		
150.000		.0560	.1770	.3570	.0990	-.1520	-.1410	-.1830		
165.000		.0560		.2770	.2130	-.1080	-.1560	-.1840		
180.000		.0570	.1400	.1840						

AMES 11-707 OA12 OEA ORBITER FUSELAGE (RBPB46)

MACH (1) = .999 ALPHA (4) = .050

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.7140	-.1080	-.0380			-.0460		-.0610	-.0460	-.0230	-.0150	-.0060
20.000	.0000		-.4300	-.6370	-.1250	-.0490			-.0500		-.0770				
40.000	.0000		-.2750	-.5090	-.1220	-.0850			-.0930		-.1380	-.0990	-.0390	-.0220	.0050
55.000	.0000		-.1970	-.4180	-.0530	-.0160			-.0390		-.1020				
70.000	.0000		-.1660	-.3540	-.0490	-.0020			-.0510		-.1440	-.3760	-.0850	-.0090	.0050
90.000	.0000	.5390	-.1430	-.3130	-.0160	-.0130			-.0800		-.1700	-.4190	-.0820	-.0240	-.0190
105.000	.0000														
110.000	.0000														
125.000	.0000		-.0450	-.1420	.0580	.0520			-.1540		-.2470	-.2680	-.0850	-.0310	-.0110
135.000	.0000														
142.000	.0000									-.4510					
150.000	.0000		.0300	.0000	.1520	.3210			-.1680		-.4530	-.1670	-.0830	-.0370	-.0120
157.000	.0000							.2000							
162.000	.0000								-.2940						
165.000	.0000										-.4370	-.1470	-.1000	-.0330	-.0240
169.000	.0000								-.2770						
172.000	.0000						.5970								
180.000	.0000	.5900	-.0010	.0730	.1900	.5370			.1440		-.4500	-.1350	-.0500	-.0430	-.0160

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0170							-.1150		-.1530
40.000	-.0040	-.0720		-.1290	-.1750	-.1930	-.1510			-.1510
70.000		-.1290	-.1650	-.1300	-.0340	-.0670	-.0510	-.0720		
90.000		-.0870	-.0760	-.0970	-.0860	-.1120	-.0890	-.0990		
105.000				-.0860	-.1430	-.1360	-.1210	-.1330		
110.000									-.2140	
125.000		-.0350	.0860	.0190	-.3750	-.2030	-.1120	-.1050	-.1700	
135.000				.4080	-.0570	-.2290	-.1370	-.1430		
150.000		-.0010	.1240	.2490	.0170	-.1920	-.1640	-.1910		
165.000		.0030		.2090	.1340	-.1510	-.1800	-.1730		
180.000		.0040	.0840	.1210						

AMES 11-7X7 OA12 OEA ORBITER FUSELAGE (RBPB46)

MACH (2) = .900 ALPHA (1) = -16.390

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.0000	.0000	.0000	-.7430	-.7950	-.1430			-.0950		-.1430	-.1090	-.0680	-.0820	-.0930
20.000	.0000		-.7330	-.7540	-.7810	-.2790			-.2000		-.2410				
40.000	.0000		-.5320	-.9390	-.5870	-.4820			-.4390		-.4440	-.2760	-.1800	-.1800	-.2060
55.000	.0000		-.3820	-.9400	-.5220	-.6420			-.5790		-.2660				
75.000	.0000		-.2190	-.7280	-.3650	-.3010			-.4390		-.1630	-.7340	.0430	.1980	.2460
90.000	.0000	.5410	-.0150	-.4190	-.3560	-.3420			-.5220		-.2150	-.6410	-.0840	.0840	.2450
105.000	.0000														
115.000	.0000														
125.000	.0000		.3790	.0910	.0680	-.0610			-.4580		-.1030	-.2810	-.1090	.0460	.1380
135.000	.0000														
142.000	.0000									-.9880					
150.000	.0000		.6650	.4820	.4620	.5280			.2740		-.2290	-.0370	.0150	.1510	.1880
157.000	.0000							.4820							
162.000	.0000								.2740						
165.000	.0000										-.5660	.0580	.1570	.1220	.1740
169.000	.0000								.3010						
172.000	.0000						.9180								
180.000	.0000	1.1100	.7430	.6240	.6190	.6550			.6840		-.6970	.0460	.0570	.1410	.2160

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.1150							-.2530		-.1310
40.000	-.2630	-.5350		-.8120	-.8680	-.7180	-.7730			-.2570
70.000		.2800	.1740	.0370	.0690	-.0570	-.0480	-.1070		
90.000		.2970	.2400	.1040	.0400	-.0510	-.0570	-.0820		
105.000				.0570	-.0990	-.0820	-.0770	-.1090		
115.000									-.2980	
125.000		.2530	.3370	.0050	-.5140	-.1840	-.1280	-.1740	-.2980	
135.000				.6490	.1460	-.2540	-.1930	-.2400		
150.000		.2880	.3970	.6240	.4090	.1000	-.0190	-.1610		
165.000		.2820		.5230	.4630	.1010	.0290	-.2510		
180.000		.2800	.3730	.4340						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 ORA ORBITER FUSELAGE (RBPB40)

MACH (2) = .901 ALPHA (2) = -10.04U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0400	.0075	.0188	.0339	.0682	.1355	.1946	.1581	.1732	.1950	.2259	.2711	.3216	.3953	.5125
PHI															
.000	.0000	.0000	.0000	-.0580	-.0840	-.0790			-.1180		-.1530	-.1110	-.0490	-.0410	:75
20.000	.0000		-.5670	-.6670	-.6830	-.1510			-.1810		-.1810				
40.000	.0000		-.3800	-.8560	-.4000	-.3980			-.4090		-.3840	-.2450	-.1370	-.1030	-.0670
55.000	.0000		-.2320	-.8840	-.2810	-.3130			-.3390		-.2100				
70.000	.0000		-.1310	-.7120	-.2100	-.1490			-.2730		-.1540	-.7130	.0120	.1220	.1940
90.000	.0000	.0210	.0420	-.4360	-.1720	-.1780			-.3320		-.2170	-.7750	-.0480	.0590	.1520
105.000	.0000														
115.000	.0000														
125.000	.0000		.2820	-.0020	.0740	.0220			-.3460		-.2060	-.3620	-.0760	.0150	.0980
135.000	.0000														
142.000	.0000									-1.0250					
150.000	.0000		.4850	.3160	.3570	.5010			.2210		-.5180	-.1260	-.0040	.0510	.1110
157.000	.0000							.4440							
162.000	.0000								.1690						
165.000	.0000										-.7040	-.1120	.1570	.0820	.0980
169.000	.0000								.2430						
172.000	.0000						.0800								
180.000	.0000	1.0080	.5190	.4370	.4680	.7870			.5430		-.0910	.0420	-.0010	.0860	.1220

X/LB	.5875	.6826	.7580	.7869	.8283	.8848	.9282	.9639	1.0015	1.0382
PHI										
.000	-.0880							-.1080		-.1330
40.000	-.0820	-.3170		-.5220	-.4830	-.5450	-.3570			-.2050
70.000		.1730	.0800	-.0310	-.0120	-.1310	-.0820	-.1000		
90.000		.1930	.1490	.0180	-.0760	-.1660	-.1140	-.1030		
105.000				.0020	-.2190	-.2080	-.1360	-.1350		
115.000									-.2900	
125.000		.1720	.2680	.0220	-.5120	-.2770	-.1710	-.1630	-.2890	
135.000				.5940	.0970	-.3180	-.2160	-.2900		
150.000		.1810	.3120	.5090	.2830	-.1050	-.1010	-.2140		
165.000		.1760		.4320	.3560	-.0200	-.0670	-.2540		
180.000		.1840	.2790	.3470						

AMES 11-7G7 OA12 OEA ORBITER FUSELAGE (RDPB48)

MACH (2) = .900 ALPHA (3) = -5.380

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0482	.1355	.1546	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.0000	.0000	.0000	-.6270	-.5680	-.0370			-.1000		-.1580	-.1270	-.0580	-.0210	-.0080
20.000	.0000		-.3940	-.6840	-.5410	-.0780			-.1240		-.1870				
40.000	.0000		-.2190	-.8130	-.2630	-.2220			-.2710		-.3230	-.3210	-.1080	-.0480	-.0170
55.000	.0000		-.1310	-.8250	-.1270	-.1050			-.1680		-.1740				
75.000	.0000		-.0670	-.6940	-.0810	-.0310			-.1490		-.1780	-.7130	-.1060	.0630	.1120
90.000	.0000	.6720	-.0420	-.4830	-.0480	-.0370			-.1830		-.2150	-.7830	-.1260	.0410	.0750
105.000	.0000														
115.000	.0000														
125.000	.0000		.1690	-.1080	.0920	.1020			-.2140		-.2970	-.6400	-.1290	.0140	.0680
135.000	.0000														
142.000	.0000									-1.0620					
150.000	.0000		.2870	.1480	.2780	.4840			.1750		-.6220	-.3080	-.1070	.0220	.0580
157.000	.0000							.4250							
162.000	.0000								.0760						
165.000	.0000										-.7740	-.3310	.2510	.0290	.0480
169.000	.0000								.1120						
172.000	.0000						.8080								
180.000	.0000	.8690	.2750	.2490	.3500	.7290			.4310		-1.1270	-.2360	-.0480	.0190	.0570

X/LB	.5873	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0270							-.0630		-.1300
40.000	-.0200	-.1880		-.3240	-.3650	-.4590	-.1980			-.1640
70.000		.0550	-.0250	-.1080	-.0980	-.1930	-.0640	-.0800		
90.000		.0790	.0550	-.0510	-.1660	-.2600	-.1420	-.0740		
105.000				-.0260	-.2740	-.2080	-.1250	-.1050		
115.000									-.2500	
120.000		.0830	.1980	.0550	-.4880	-.3390	-.1510	-.1230	-.2070	
135.000				.5250	.0490	-.3980	-.2060	-.1690		
150.000		.1080	.2340	.4070	.1670	-.2280	-.1630	-.2250		
165.000		.0930		.3420	.2580	-.1380	-.1410	-.2250		
180.000		.0820	.1980	.2540						

DATE 17 SEP 79 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 OEA ORBITER FUSELAGE (RBP846)

MACH (2) = .9U2 ALPHA (4) = .06U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.6120	-.3550	-.0110			-.0540		-.1170	-.1280	-.0530	-.0040	.0290
20.000	.0000		-.1910	-.6920	-.2350	-.0250			-.0600		-.1360				
40.000	.0000		-.0690	-.7690	-.0960	-.0670			-.1120		-.2140	-.2540	-.0490	-.0020	.0360
55.000	.0000		-.0230	-.7120	-.0680	.0180			-.0480		-.1540				
70.000	.0000		-.0090	-.6130	.0040	.0470			-.0530		-.1970	-.0890	-.0530	.0230	.0350
90.000	.0000	.0850	-.0210	-.5130	.0330	.0560			-.0690		-.2510	-.7920	-.0670	.0200	.0140
105.000	.0000														
115.000	.0000														
120.000	.0000		.0280	-.2210	.1070	.1660			-.0820		-.4640	-.8160	-.0120	.0170	.0270
135.000	.0000									-1.0720					
142.000	.0000										-.7830	-.4550	-.0310	.0160	.0160
150.000	.0000		.0600	-.0260	.2000	.4670			.1330						
157.000	.0000							.4000							
162.000	.0000								.0000		-.8990	-.4080	.4050	.0210	.0080
165.000	.0000														
169.000	.0000								-.2110						
172.000	.0000						.7650								
180.000	.0000	.0080	.0140	.0640	.2450	.6790			.3240		-.9710	-.5110	-.0160	.0100	.0170

X/LB	.5873	.6826	.7380	.7869	.8283	.8848	.9282	.9639	1.0015	1.0382
PHI										
.000	.0280							-.0910		-.1340
40.000	.0480	-.0350		-.1430	-.2320	-.3680	-.2820			-.1480
75.000		-.0920	-.1580	-.1890	-.1430	-.3530	-.0660	-.0480		
90.000		-.0510	-.0580	-.1050	-.2240	-.4210	-.1070	-.0560		
105.000				-.0660	-.3060	-.4430	-.1210	-.0690		
110.000									-.2210	
120.000		-.0130	.1120	.0720	-.4700	-.4910	-.1100	-.0870	-.1780	
135.000				.4530	-.0180	-.5230	-.1660	-.1470		
150.000		.0110	.1510	.2960	.0510	-.3700	-.2090	-.2060		
165.000		.0130		.2520	.1580	-.2660	-.2060	-.2070		
180.000		.0150	.1190	.1620						

AMES 11-7U7 OA12 OEA ORBITER FUSELAGE (RBP047) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.0490 INCHES YMRP = .0000 INCHES
BREF = 39.0490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = -5.000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

MACH (1) = .900 BETA (1) = -15.300

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1946	.1501	.1732	.1953	.2259	.2711	.3254	.3953	.5125
PHI															
.000	.0000	.0000	.0000	-.9880	-.2220	-.1120			-.1210		-.1270	-.1090	-.1050	-.0770	-.0780
25.000	.0000		-.6560	-.8870	-.3370	-.1940			-.1880		-.1950				
40.000	.0000		-.2720	-.8460	-.3910	-.5190			-.5480		-.5780	-.4450	-.3420	-.2270	-.1740
55.000	.0000		-.0220	-.3360	-.1930	-.1420			-.1910		-.1880				
70.000	.0000		.1560	-.1450	.0650	.0890			.0560		-.0460	-.0580	.0230	.1480	.1370
90.000	.0000	.0210	.3010	.0080	.1480	.1340			.0730		-.0270	-.0780	.0140	.0770	.0980
105.000	.0000														
115.000	.0000														
125.000	.0000		.4340	.2270	.3080	.2890			.1450		-.0470	-.1910	-.0620	.0490	.0740
135.000	.0000														
142.000	.0000									-.1820					
150.000	.0000		.3980	.2680	.3420	.5180			.1720		-.3530	-.0890	-.0310	.0440	.0290
157.000	.0000							.5050							
162.000	.0000								.1880						
165.000	.0000										-.2680	-.0750	-.1930	.0130	.0390
169.000	.0000								-.1420						
172.000	.0000						.6380								
180.000	.0000	.6800	.1570	.1500	.2020	.4850			.1820		-.4670	-.2130	-.1910	-.1540	-.1450

X/LB	.5873	.6626	.7360	.7869	.8283	.8848	.9262	.9639	1.0015	1.0382
PHI										
.000	-.0930							-.1350		-.1750
40.000	-.2540	-.2750		-.2570	-.2760	-.2470	-.1630			-.1700
70.000		.0700	.0430	.0590	.1360	.0540	.0510	-.0340		
90.000		.0870	.1010	.1230	.1190	.0250	-.0010	-.0550		
105.000				.1900	.0720	.0040	-.0250	-.0780		
115.000									-.1770	
125.000		.0840	.2120	.3560	-.0320	-.0260	.0030	-.0270	-.1220	
135.000				.3690	.1060	-.0270	.0050	-.0590		
150.000		.0590	.1640	.1740	-.0200	.0390	.0320	-.0890		
165.000		.0770		.2300	.2030	.1430	.0520	-.1900		
180.000		-.2100	-.1420	-.0310						

AMES 11-7D7 OA12 CEA ORBITER FUSELAGE (RBF047)

MACH (1) = .997 BETA (2) = -5.19

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.9470	-.1820	-.0920			-.0960		-.1040	-.0840	-.0590	-.0540	-.0580
25.000	.0000		-.6630	-.8510	-.2570	-.1380			-.1460		-.1410				
40.000	.0000		-.3780	-.6620	-.3010	-.3450			-.3560		-.3870	-.3050	-.2540	-.1370	-.1100
55.000	.0000		-.1740	-.4410	-.1280	-.0890			-.0840		-.1220				
70.000	.0000		-.0330	-.2850	-.0310	.0140			-.0210		-.1110	-.3210	-.0270	.0650	.1010
90.000	.0000	.6840	.0960	-.1620	.0470	.0270			-.0350		-.1210	-.3440	-.0360	.0390	.0650
105.000	.0000														
110.000	.0000														
120.000	.0000		.2670	.0840	.1940	.1610			-.0440		-.1360	-.1990	-.0360	.0100	.0580
135.000	.0000														
142.000	.0000									-.2740					
150.000	.0000		.3290	.2220	.3030	.4560			.0510		-.3480	-.1140	-.0410	.0240	.0380
157.000	.0000							.4010							
162.000	.0000								-.0490						
165.000	.0000										-.3290	-.1000	-.1170	.0430	.0220
169.000	.0000								-.0510						
172.000	.0000						.6780								
180.000	.0000	.7370	.2110	.2080	.2700	.3720			.2590		-.4060	-.1320	-.1010	-.0430	-.0690

X/LB	.5073	.6626	.7380	.7969	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0820							-.1210		-.1510
40.000	-.1340	-.2200		-.2280	-.2540	-.2350	-.1590			-.1580
70.000		.0190	-.0150	-.0180	.0600	-.0040	-.0480	-.0540		
90.000		.0470	.0490	.0290	.0280	-.0360	-.0460	-.0790		
105.000				.0610	-.0300	-.0680	-.0700	-.1030		
110.000									-.2050	
120.000		.0650	.1840	.1820	-.2100	-.1090	-.0530	-.0720	-.1540	
135.000				.4500	.0790	-.0980	-.0450	-.0940		
150.000		.0680	.1880	.2670	.0550	-.0480	-.0500	-.1340		
165.000		.0680		.2550	.2170	.0250	-.0490	-.1780		
180.000		.0170	.0940	.1370						

AMES 11-7X7 OA12 OPA ORBITER FUSELAGE (ORBA#)

MACH (1) = .597 BETA (3) = 5.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0642	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3264	.3995	.5122
PHI															
.000	.0000	.0000	.0000	-.9590	-.1880	-.1070			-.1090		-.2160	-.0820	-.0570	-.0360	-.0170
2.000	.0000		-.7960	-.8950	-.1820	-.0910			-.0890		-.1070				
4.000	.0000		-.6640	-.7470	-.2050	-.1380			-.1380		-.1800	-.1260	-.0640	-.0590	-.0470
55.000	.0000		-.5580	-.6800	-.1750	-.1160			-.1340		-.1690				
7 .000	.0000		-.4810	-.5890	-.1740	-.1120			-.1530		-.2040	-.3820	-.0700	.0140	.0510
9 .000	.0000	.3050	-.3950	-.5220	-.1860	-.1720			-.2230		-.2420	-.4030	-.0870	-.0130	.0260
105.000	.0000														
11 .000	.0000														
2 .000	.0000		-.1420	-.2680	-.1050	-.1620			-.4490		-.2550	-.2860	-.1190	-.0560	-.0190
135.000	.0000														
142.000	.0000									-.6010					
15 .000	.0000		.1020	.0220	.1120	.1860			-.2510		-.3600	-.1690	-.0990	-.0390	.0090
157.000	.0000							.0230							
162.000	.0000								-.3660						
165.000	.0000										-.3890	-.1230	-.1070	-.0610	-.0620
169.000	.0000								-.1790						
172.000	.0000						.5760								
180.000	.0000	.7370	.2250	.2110	.2750	.5690			.2450		-.3940	-.1280	-.0920	-.0460	-.0240

X/LB	.5873	.6626	.7380	.7869	.8263	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0870							-.1190		-.1520
40.000	-.0680	-.1590		-.1760	-.2040	-.2170	-.1570			-.1620
75.000		-.0370	-.1200	-.1570	-.0660	-.1070	-.0820	-.1140		
90.000		-.0130	-.0820	-.1380	-.1210	-.1450	-.1210	-.1240		
105.000				-.1960	-.2440	-.1850	-.1490	-.1570		
110.000									-.2340	
120.000		-.0460	.0810	-.2630	-.6560	-.2920	-.1870	-.1720	-.2200	
135.000				.4040	-.1810	-.4220	-.2900	-.2510		
150.000		.0310	.1290	.3250	.1640	-.2630	-.2270	-.2280		
165.000		-.0150		.2380	.1710	-.2740	-.2510	-.1810		
180.000		.0250	.1040	.1410						

AMES 11-7X7 OA12 OEA ORBITER FUSELAGE (PBPB47)

MACH (1) = .599 BETA (4) = 10.08

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.9730	-.2100	-.1180			-.1190		-.1290	-.1060	-.0890	-.0780	-.0790
20.000	.0000		-.8290	-.9080	-.1830	-.0950			-.0930		-.1180				
40.000	.0000		-.7770	-.8010	-.1910	-.0980			-.1030		-.1590	-.1240	-.0620	-.0400	-.0340
55.000	.0000		-.7430	-.8140	-.1870	-.1230			-.1390		-.1710				
70.000	.0000		-.6950	-.7530	-.2140	-.1510			-.1840		-.2280	-.3840	-.0950	-.0650	.0330
90.000	.0000	.1050	-.6350	-.6770	-.2600	-.2390			-.2780		-.2840	-.3930	-.1160	-.0190	.0080
105.000	.0000														
110.000	.0000														
120.000	.0000		-.3620	-.4530	-.2570	-.3220			-.6240		-.3060	-.3260	-.1530	-.0880	-.0350
135.000	.0000														
142.000	.0000									-.9710					
150.000	.0000		-.0620	-.1270	-.0410	-.0690			-.4160		-.4030	-.2340	-.1390	-.0520	-.0830
157.000	.0000							-.2430							
162.000	.0000								-.6440						
165.000	.0000										-.5290	-.1890	-.1140	-.2130	-.1790
169.000	.0000								-.3490						
172.000	.0000						.4300								
180.000	.0000	.0840	.1610	.1380	.2020	.4650			.1430		-.4720	-.2150	-.1730	-.1480	-.1360

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0960							-.1350		-.1720
40.000	-.0500	-.1310		-.1610	-.1840	-.2020	-.1570			-.1670
70.000		-.0680	-.1690	-.2210	-.1230	-.1590	-.1230	-.1320		
90.000		-.0480	-.1100	-.2060	-.1890	-.1920	-.1620	-.1540		
105.000				-.2730	-.3040	-.2440	-.1970	-.1890		
110.000									-.2270	
120.000		-.0490	.0610	-.3840	-.8060	-.3620	-.2490	-.2240	-.2560	
135.000				.3350	-.3220	-.6190	-.4300	-.3430		
150.000		-.1400	-.0590	.1270	.0630	-.4150	-.3440	-.2730		
165.000		-.1390		.1260	.0240	-.4920	-.3930	-.1940		
180.000		-.1160	-.1070	-.1230						

AMES 11-FT OA12 02A ORBITER FUSELAGE (RBFB47)

MACH (2) = .498 BETA (1) = -10.440

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/B	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3294	.3953	.5129
Z/B															
.1440	.0000	.0000	.0000	-.6960	-.5720	-.1840			-.1370		-.2050	-.1330	-.0880	-.0450	-.0310
2.1440	.0000		-.3250	-.7740	-.5090	-.1860			-.2090		-.2830				
4.1440	.0000		-.0230	-.6810	-.4090	-.5680			-.6430		-.7920	-.6090	-.3280	-.1980	-.1160
55.1440	.0000		.1720	-.3250	-.0810	-.0560			-.0550		-.1120				
70.1440	.0000		.3040	-.1310	.0860	.1350			.0650		-.0480	-.6420	.0600	.1350	.1760
90.1440	.0000	.9470	.4110	.0410	.2070	.1880			.1940		-.0410	-.7290	.0470	.1090	.1740
105.1440	.0000														
110.1440	.0000														
121.1440	.0000		.5210	.2660	.3610	.3750			.1710		-.0600	-.7260	.0320	.0780	.1130
135.1440	.0000														
140.1440	.0000									-.0980					
150.1440	.0000		.4790	.3110	.4030	.6330			.3450		-.4350	-.4540	-.0130	.0390	.0710
157.1440	.0000							.6480							
162.1440	.0000								.2650						
165.1440	.0000										-.5130	-.3880	.0610	.0540	.0720
169.1440	.0000								.1210						
173.1440	.0000						.7940								
180.1440	.0000	.8320	.2470	.2130	.2780	.6340			.3730		-.9250	-.6180	-.1260	-.1520	-.1680
X/B	.5973	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
Z/B															
.1440	-.0540							-.1220		-.1670					
4.1440	-.1250	-.3520		-.3490	-.4070	-.3930	-.1540			-.1840					
70.1440		.1230	.0670	.0730	.1520	.0610	.0760	.0190							
90.1440		.1400	.1390	.1520	.1220	.0240	.0510	.0130							
105.1440				.2360	.0560	.0040	.0240	-.0150							
110.1440									-.2230						
121.1440		.1220	.2530	.4280	-.0450	-.0240	.0470	.0140	-.1460						
135.1440				.4550	.1540	.0130	.0730	.0000							
150.1440		.1010	.2310	.2560	.0340	.1070	.1100	-.0550							
165.1440		.1240		.3150	.2610	.2090	.1430	-.2460							
180.1440		-.1510	-.0310	.0660											

AMES 11-FT OA12 02A ORBITER FUSELAGE (RBFB47)

MACH (2) = .904 BETA (2) = -5.27

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/B	.0075	.0189	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI														
.000	.0000	.0000	.0000	-.6460	-.5730	-.0620		-.1200		-.1890	-.1340	-.0660	-.0270	-.0140
20.000	.0000		-.3520	-.7720	-.4960	-.1220		-.1620		-.2420				
40.000	.0000		-.1160	-.6080	-.3480	-.3720		-.4170		-.4510	-.4790	-.1750	-.1040	-.0540
55.000	.0000		.0310	-.5800	-.1190	-.0940		-.1200		-.1620				
70.000	.0000		.1250	-.3360	-.0260	.0390		-.0530		-.1330	-.6880	.0150	.0870	.1300
90.000	.0000	.0280	.2490	-.2030	.0690	.0690		-.0640		-.1360	-.7760	.0030	.0690	.0950
105.000	.0000													
110.000	.0000													
125.000	.0000		.3480	.0900	.2420	.2450		-.0290		-.1400	-.7530	.0190	.0500	.0860
135.000	.0000													
142.000	.0000								-.7910					
150.000	.0000		.3930	.2410	.3580	.5760		.2710		-.4250	-.4690	.1640	.0330	.0680
157.000	.0000						.5570							
162.000	.0000							.1900						
165.000	.0000									-.6860	-.3880	.0250	.0360	.0510
169.000	.0000							.1290						
172.000	.0000					.8300								
180.000	.0000	.8620	.2710	.2380	.3310	.7070		.4200		-1.0470	-.3860	-.0420	-.0130	.0210

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0350							-.0930		-.1370
40.000	-.0550	-.2570		-.3430	-.3930	-.4760	-.1760			-.1560
70.000		.0790	.0150	-.0290	.0160	-.0530	-.0610	-.0260		
90.000		.1000	.0840	.0410	-.0290	-.1000	-.0370	-.0320		
105.000				.1000	-.1130	-.1280	-.0580	-.0620		
110.000									-.2410	
125.000		.1050	.2270	.2590	-.3110	-.1640	-.0470	-.0550	-.1770	
135.000				.5310	.1100	-.1260	-.0390	-.0770		
150.000		.0990	.2420	.3380	.1080	-.0360	-.0130	-.1360		
165.000		.1000		.3340	.2690	.0450	.0070	-.2430		
180.000		.0570	.1610	.2260						

AMES 11-FT OA12 O2A ORBITER FUSELAGE (FEB847)

MACH / 2/ = .902 BETA / 3/ = 5.07

SECTION / 1/ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1591	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.00	.0000	.0000	.0000	-.6350	-.5970	-.0520			-.1120		-.1920	-.1260	-.0590	-.0360	-.0160
2.00	.0000		-.4420	-.6420	-.5900	-.0580			-.1070		-.1980				
4.00	.0000		-.3390	-.6370	-.3110	-.1220			-.1770		-.3250	-.1760	-.0580	-.0270	-.0030
55.00	.0000		-.2900	-.8470	-.1390	-.1170			-.1860		-.3810				
7.00	.0000		-.2450	-.8760	-.0990	-.0830			-.2130		-.4660	-.6510	-.0350	.0510	.0950
9.00	.0000	.5070	-.1950	-.7410	-.1360	-.1320			-.2820		-.5060	-.5390	-.0470	.0290	.0570
115.00	.0000														
11.00	.0000														
12.00	.0000		-.1640	-.3010	-.0810	-.0610			-.3940		-.6040	-.3550	-.0680	-.0140	.0350
135.00	.0000														
142.00	.0000									-1.1710					
15.00	.0000		.1980	.0450	.1610	.3440			.0590		-.7090	-.4290	-.0210	.0150	.0480
157.00	.0000							.2370							
162.00	.0000								-.1660						
165.00	.0000										-.8190	-.4520	.0350	-.0320	-.0220
169.00	.0000								.0770						
172.00	.0000						.7410								
18.00	.0000	.8180	.2870	.2420	.3350	.7030			.4120		-.9840	-.4220	-.0470	-.0110	.0310

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.00	-.0340							-.0900		-.1360
4.00	-.0110	-.1610		-.3150	-.3410	-.4260	-.1880			-.1630
7.00		.0490	-.0390	-.1570	-.1710	-.4160	-.1780	-.0680		
9.00		.0690	.0300	-.1170	-.2580	-.4470	-.2880	-.0920		
105.00				-.1330	-.4280	-.4500	-.3800	-.1310		
11.00									-.2380	
12.00		.0640	.1560	-.1260	-.6560	-.5220	-.4640	-.1710	-.2210	
135.00				.5190	-.1450	-.7180	-.5140	-.4790		
15.00		.0680	.1900	.3510	.2270	-.3530	-.4290	-.3510		
165.00		.0330		.3020	.2440	-.3040	-.3570	-.2340		
18.00		.0620	.1730	.2300						

DATE 17 SEP 79 TABULATED PRESSURE DATA - OA12A

AMES 11-7X7 OA12 OBA ORBITER FUSELAGE (RBFB47)

MACH = 2 = .898 BETA (4) = 10.220

SECTION 1 ORBITER FUSELAGE DEPENDENT VARIABLE C_P

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.6880	-.5750	-.4870			-.1330		-.2170	-.1420	-.0810	-.0480	-.0250
20.000	.0000		-.4780	-.6920	-.5630	-.4480			-.1080		-.2080				
40.000	.0000		-.4360	-.7840	-.4730	-.3520			-.1360		-.2910	-.1510	-.0440	-.0060	.0050
55.000	.0000		-.4290	-.7820	-.4500	-.3080			-.1870		-.3920				
70.000	.0000		-.4250	-.8160	-.3490	-.1110			-.2410		-.5450	-.3110	-.0450	.0450	.0830
90.000	.0000	.3340	-.3720	-.8260	-.2230	-.1940			-.3490		-.6300	-.2940	-.0510	.0330	.0560
105.000	.0000														
110.000	.0000														
125.000	.0000		-.1790	-.4840	-.2930	-.2230			-.5520		-.7880	-.3530	-.0560	-.0220	.0140
135.000	.0000									-1.2630					
142.500	.0000								-.0860		-1.1050	-.5250	.0050	-.0620	-.0790
150.000	.0000		.0670	-.0880	.0080	.1700		.0350							
157.500	.0000								-.2120						
162.500	.0000										-1.1080	-.4720	.0690	-.1580	-.1320
165.000	.0000								.0010						
169.000	.0000						.6060								
172.500	.0000								.3450		-.8570	-.6540	-.1110	-.1500	-.1230
180.000	.0000	.7820	.2500	.1940	.2710	.6160									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0540							-.1300		-.1750
4.000	-.0120	-.1440		-.3070	-.3130	-.3310	-.1970			-.1890
70.000		.0340	-.0530	-.2020	-.2130	-.5140	-.3680	-.1450		
90.000		.0470	.0090	-.1570	-.3220	-.5240	-.5240	-.1790		
105.000				-.1700	-.4870	-.5400	-.5610	-.2190		
110.000									-.2480	
125.000		.0410	.1240	-.1540	-.7560	-.6660	-.6010	-.3910	-.2930	
139.000				.3680	-.1020	-.9090	-.9370	-.6270		
150.000		-.0690	.0740	.2360	.1540	-.4350	-.5890	-.5530		
165.000		-.0550		.2280	.1450	-.4460	-.4980	-.2640		
180.000		-.0490	-.0480	.0830						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7X7 OA12 02A ORBITER FUSELAGE (RBPB48) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = -10.000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

MACH (1) = .598 BETA (1) = -10.280

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-1.2150	-.2610	-.1560			-.1460		-.1440	-.1230	-.1040	-.1030	-.1160
20.000	.0000		-.9420	-1.1140	-.4370	-.2800			-.2840		-.2780				
40.000	.0000		-.5540	-.9000	-.5930	-.7850			-.8020		-.8040	-.6760	-.4870	-.3280	-.2290
55.000	.0000		-.2130	-.5340	-.2910	-.2660			-.2050		-.2020				
70.000	.0000		.0240	-.2690	-.0760	.0480			-.0150		-.0940	-.2720	.0250	.1560	.2220
90.000	.0000	.7410	.2620	-.0450	.0650	.0590			.0100		-.0670	-.2550	.0130	.1060	.1730
115.000	.0000														
110.000	.0000														
120.000	.0000		.5300	.3040	.3310	.2730			.0760		.0490	-.0910	.0450	.1050	.1510
135.000	.0000									-.0640					
142.000	.0000								.2700		-.2440	-.0230	.0380	.0810	.1110
150.000	.0000		.5780	.4230	.4510	.5790		.5760							
157.000	.0000								.2340						
162.000	.0000										-.1720	-.0480	-.1970	.0780	.1050
165.000	.0000								.1420						
169.000	.0000						.7070								
172.000	.0000								.3190		-.3920	-.1550	-.1380	-.0830	-.0500
180.000	.0000	.8280	.3780	.3050	.3160	.5540									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI								-.1820		-.2040
.000	-.1470									-.2070
40.000	-.2640	-.3780		-.3440	-.2990	-.2770	-.1910			
70.000		.1620	.1210	.1020	.1640	.0620	.0250	-.0480		
90.000		.1850	.1760	.1510	.1380	.0330	-.0010	-.0540		
115.000				.1960	.0770	.0120	-.0190	-.0810		
110.000									-.2660	
120.000		.1820	.2840	.3250	-.0490	-.0130	.0070	-.0370	-.1460	
135.000				.4770	.2130	.0260	.0470	-.0360		
150.000		.1540	.2430	.2770	.0980	.0180	-.0750	-.1840		
165.000		.1550		.3020	.2780	.1970	.0960			
180.000		-.0520	-.0210	.0610						

AMES 11-7X7 OA12 OEA ORBITER FUSELAGE (RBPB48)

MACH (1) = .598 BETA (2) = -5.180

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/L	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3208	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-1.1950	-.2290	-.1250			-.1290		-.1210	-.0990	-.0780	-.0840	-.1080
20.000	.0000		-.9780	-1.0880	-.3400	-.2110			-.2200		-.2070				
40.000	.0000		-.6330	-.8810	-.4770	-.5570			-.5660		-.5700	-.4630	-.3030	-.2210	-.2070
55.000	.0000		-.3660	-.6230	-.3030	-.2670			-.2220		-.2150				
75.000	.0000		-.1640	-.4180	-.1550	-.0650			-.0920		-.1590	-.3250	-.0670	.1110	.1840
90.000	.0000	.6060	.0550	-.2240	-.0530	-.0540			-.1080		-.1540	-.3350	-.0480	.0550	.1340
105.000	.0000														
110.000	.0000														
120.000	.0000		.3600	.1450	.1860	.1210			-.1170		-.0820	-.1580	-.0210	.0450	.1110
135.000	.0000														
142.000	.0000									-.1980					
150.000	.0000		.5010	.3660	.3910	.5010			.1490		-.2160	-.0480	.0130	.0570	.0980
157.000	.0000							.4590							
162.000	.0000								.1270						
165.000	.0000										-.2250	-.0310	-.3250	.05	.1320
169.000	.0000								.1220						
172.000	.0000						.7430								
180.000	.0000	.7900	.4230	.3590	.3790	.6370			.3870		-.3140	-.0690	-.0520	.0660	.0460

X/L	.5873	.6626	.7380	.7869	.8233	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.1490							-.1280		-.1520
40.000	-.2480	-.3190		-.2740	-.2830	-.2590	-.1880			-.1700
75.000		.1180	.0630	.0260	.0890	.0090	-.0080	-.0570		
90.000		.1470	.1190	.0640	.0560	-.0250	-.0390	-.0770		
105.000				.0710	-.0230	-.0530	-.0620	-.1100		
110.000									-.2220	
120.000		.1410	.2430	.1380	-.2450	-.1040	-.0590	-.0920	-.1740	
135.000				.5220	.1470	-.0760	-.0370	-.0900		
150.000		.1440	.2590	.3640	.1600	.0130	-.0080	-.1190		
165.000		.1390		.3260	.2950	.0850	-.0090	-.1850		
180.000		.0870	.1620	.2020						

AMES 11-7U7 OA12 OEA ORBITER FUSELAGE (RBPB48)

MACH (1) = .997 BETA (3) = 5.02U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-1.1960	-.2310	-.1280			-.1190		-.1230	-.1000	-.0830	-.0910	-.1120
20.000	.0000		-1.0750	-1.1370	-.2330	-.1240			-.1190		-.1280				
40.000	.0000		-.9020	-.9350	-.3000	-.2250			-.2270		-.2450	-.1770	-.1220	-.1080	-.1460
55.000	.0000		-.7620	-.8380	-.2850	-.2270			-.2230		-.2250				
70.000	.0000		-.6050	-.7070	-.2780	-.1910			-.2130		-.2480	-.3840	-.0630	.0510	.1060
90.000	.0000	.2210	-.4470	-.6120	-.3030	-.2840			-.3080		-.2960	-.4270	-.1230	-.0170	.0770
105.000	.0000														
111.000	.0000														
120.000	.0000		-.0770	-.2640	-.1760	-.2670			-.5700		-.2640	-.3150	-.1630	-.0910	-.0150
135.000	.0000														
142.000	.0000									-.5370					
150.000	.0000		.2570	.1320	.1550	.1830			-.1980		-.2990	-.1520	-.0890	-.0220	.0470
157.000	.0000							.0320							
162.000	.0000								-.2430						
165.000	.0000										-.3350	-.0810	-.5270	-.0720	-.0520
169.000	.0000								-.0170						
172.000	.0000						.6350								
180.000	.0000	.7880	.4410	.3650	.3860	.6300			.3730		-.3080	-.0690	-.0440	.0060	.0490

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.1520							-.1350		-.1500
40.000	-.1920	-.2980		-.2360	-.2430	-.2410	-.1730			-.1630
70.000		.0390	-.0610	-.1380	-.0590	-.1160	-.0950	-.1130		
90.000		.0670	.0030	-.0980	-.0940	-.1190	-.0990	-.1190		
105.000				-.1750	-.2070	-.1630	-.1290	-.1460		
111.000									-.2370	
120.000		.0340	.0910	-.3280	-.6970	-.2940	-.1970	-.1940	-.2370	
135.000				.4090	-.1970	-.4710	-.3390	-.2930		
150.000		.0740	.1760	.3790	.2650	-.2260	-.2160	-.2160		
165.000		.0480		.2840	.2290	-.2260	-.2330	-.1960		
180.000		.0870	.1630	.2260						

AMES 11-7X7 OA12 O2A ORBITER FUSELAGE (RBPB48)

MACH (1) = .599 BETA (4) = 10.12D

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-1.2000	-.2580	-.1480			-.1450		-.1460	-.1340	-.1200	-.1070	-.1190
20.000	.0000		-1.1080	-1.1170	-.2220	-.1220			-.1120		-.1300				
40.000	.0000		-1.0280	-.9890	-.2510	-.1500			-.1490		-.1850	-.1430	-.1140	-.0730	-.0820
55.000	.0000		-.9360	-.9620	-.2640	-.1900			-.2000		-.2020				
70.000	.0000		-.8120	-.8490	-.2950	-.2170			-.2410		-.2600	-.3880	-.0940	.0280	.0570
90.000	.0000	.0210	-.6770	-.7630	-.3850	-.3520			-.3680		-.3420	-.4320	-.1490	-.0300	.0460
105.000	.0000														
110.000	.0000														
120.000	.0000		-.3110	-.4670	-.3500	-.4520			-.7560		-.3430	-.3810	-.2260	-.1530	-.0660
135.000	.0000														
142.000	.0000									-.9200					
150.000	.0000		.0820	-.0410	-.0120	-.0380			-.3850		-.3780	-.2550	-.1360	-.0180	-.0910
157.000	.0000							-.2530							
162.000	.0000								-.5020						
165.000	.0000										-.4340	-.1870	-.7930	-.2600	-.2070
169.000	.0000								-.1570						
172.000	.0000						.4830								
180.000	.0000	.6080	.3700	.2880	.3020	.5260			.2670		-.3980	-.1680	-.1300	-.0930	-.0580

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.1500							-.1990		-.2090
40.000	-.1200	-.2230		-.2170	-.2280	-.2400	-.1770			-.1680
75.000		-.0120	-.1330	-.2200	-.1360	-.2010	-.1690	-.1840		
90.000		.0150	-.0710	-.1810	-.1740	-.1810	-.1450	-.1420		
105.000				-.2450	-.2620	-.2290	-.1840	-.1830		
110.000									-.2100	
120.000		-.0170	.0170	-.4260	-.8260	-.3410	-.2560	-.2560	-.2620	
135.000				.3280	-.3920	-.7150	-.4980	-.3860		
150.000		-.1330	-.0340	.1610	.0710	-.3510	-.3170	-.2650		
165.000		-.1410		.1450	.0550	-.4040	-.3480	-.1880		
180.000		-.0340	.0390	.0570						

AMES 11-7X7 OA12 32A ORBITER FUSELAGE (RBRB48)

MACH (2) = .9?? BETA (1) = -10.46?

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0175	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
BM:															
.000	.0000	.0000	.0000	-.7190	-.7020	-.1370			-.1650		-.2190	-.1240	-.0700	-.0510	-.0620
2.000	.0000		-.5190	-.8290	-.6340	-.2590			-.1960		-.3960				
4.000	.0000		-.1420	-.8110	-.5660	-.9260			-.7750		-.9510	-.5740	-.2940	-.2460	-.1180
55.000	.0000		.0430	-.4440	-.2430	-.2540			-.2040		-.1830				
7.000	.0000		.2210	-.2110	-.0110	.0440			-.0150		-.1940	-.6550	.0840	.2060	.2760
9.000	.0000	.9010	.4060	.0360	.1460	.1040			-.0010		-.0740	-.7060	.0420	.1540	.2270
105.000	.0000														
11.000	.0000														
12.000	.0000		.6350	.3720	.4040	.3590			.0890		-.0160	-.3530	.0560	.1370	.1990
135.000	.0000														
142.000	.0000									-.0690					
15.000	.0000		.6750	.4920	.5220	.6910			.4170		-.3420	-.1590	.0390	.1090	.1590
157.000	.0000							.7040							
162.000	.0000								.3770						
165.000	.0000										-.4530	-.1470	.0170	.1140	.1510
169.000	.0000								.2760						
172.000	.0000						.8550								
18.000	.0000	.9800	.4840	.3950	.4010	.6980			.4850		-.8090	-.3980	-.1050	-.0560	-.0630

X/LB	.5879	.6628	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
BM:										
.000	-.1140							-.1940		-.2230
4.000	-.1030	-.3910		-.4710	-.5230	-.6140	-.2640			-.2510
7.000		.2470	.1880	.1530	.1940	.0730	.0510	-.0290		
9.000		.2610	.2450	.2150	.1680	.0470	.0290	-.0190		
105.000				.2760	.1140	.0270	.0130	-.0460		
11.000									-.2750	
12.000		.2400	.3540	.4320	-.0300	.0030	.0440	-.0110	-.1820	
135.000				.5660	.2690	.0750	.1050	.0690		
15.000		.2030	.3260	.3610	.1640	.1810	.1630	-.0280		
165.000		.2140		.3970	.3560	.2860	.2000	-.2380		
18.000		-.0240	.0430	.1420						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7D7 OA12 O2A ORBITER FUSELAGE (RBPB48)

MACH (2) = .90 BETA (2) = -5.27D

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.6690	-.7010	-.0970			-.1430		-.1750	-.1040	-.0590	-.0460	-.0470
20.000	.0000		-.5450	-.7540	-.6260	-.2260			-.2430		-.2250				
40.000	.0000		-.2790	-.8160	-.4720	-.6210			-.5540		-.6710	-.3050	-.2110	-.1670	-.1050
55.000	.0000		-.1030	-.6780	-.2760	-.3120			-.2700		-.2270				
70.000	.0000		.0450	-.4570	-.1390	-.0720			-.1420		-.1640	-.7170	.0430	.1580	.2290
90.000	.0000	.7720	.2090	-.1950	-.0090	-.0430			-.1800		-.1670	-.7690	-.0090	.0960	.1790
105.000	.0000														
110.000	.0000								-.1420		-.1200	-.3870	-.0070	.0810	.1520
120.000	.0000		.4680	.1960	.2560	.2010									
135.000	.0000									-.0110					
142.000	.0000										-.3670	-.1520	.0190	.0850	.1410
150.000	.0000		.5890	.4150	.4580	.6140			.3220						
157.000	.0000							.5960							
162.000	.0000								.2880						
165.000	.0000										-.5190	-.1150	.0130	.0830	.1220
169.000	.0000								.2690						
172.000	.0000						.8790								
180.000	.0000	.9990	.5060	.4240	.4520	.7630			.5280		-.9220	-.0920	-.0360	.0360	.0840

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0840							-.1310		-.1490
40.000	-.0810	-.3540		-.4930	-.5050	-.3920	-.2300			-.1950
70.000		.2060	.1350	.0600	.0880	-.0210	-.0120	-.0670		
90.000		.2220	.1940	.1110	.0510	-.0590	-.0420	-.0610		
105.000				.1380	-.0420	-.0800	-.0620	-.0910		
110.000									-.2600	
120.000		.2110	.3180	.2490	-.2840	-.1180	-.0520	-.0910	-.2290	
135.000				.6220	.2030	-.0640	-.0220	-.0870		
150.000		.2000	.3280	.4470	.2270	.0560	.0420	-.1120		
165.000		.1920		.4200	.3680	.1390	.0720	-.2590		
180.000		.1410	.2390	.2980						

AMES 11-7X7 OA12 OBA ORBITER FUSELAGE (RBFB48)

MACH (2) = .901 BETA (3) = 5.110

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0189	.0339	.0512	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3250	.3953	.5120
BM:															
.000	.0000	.0000	.0000	-.6640	-.6890	-.0980			-.1370		-.1850	-.1100	-.0570	-.0520	-.0500
2.000	.0000		-.5030	-.6670	-.6490	-.1010			-.1360		-.1630				
4.000	.0000		-.4840	-.9070	-.4590	-.2490			-.2790		-.2550	-.1540	-.0860	-.0600	-.0570
55.000	.0000		-.4030	-.8600	-.2810	-.2820			-.3370		-.3930				
7.000	.0000		-.3160	-.9110	-.1920	-.2110			-.3310		-.4860	-.3900	.0010	.0990	.1540
9.000	.0000	.4500	-.1970	-.6760	-.4730	-.2990			-.4500		-.5650	-.3960	-.0640	.0350	.1260
105.000	.0000														
110.000	.0000														
120.000	.0000		.0940	-.1990	-.1440	-.1820			-.5440		-.6650	-.2280	-.1180	-.0530	.0410
135.000	.0000														
142.000	.0000									-1.1420					
150.000	.0000		.3760	.1980	.2350	.3460			.0870		-.8930	-.2120	-.0160	.0190	.0830
157.000	.0000							.2410							
162.000	.0000								.0050						
165.000	.0000										-.8640	-.1570	.0120	-.0560	-.0160
169.000	.0000								.1900						
172.000	.0000						.7840								
180.000	.0000	.9530	.5240	.4300	.4550	.7590			.5170		-.8540	-.0960	-.0160	.0310	.0860

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
BM:										
.000	-.1050							-.1350		-.1550
4.000	-.0740	-.2500		-.5070	-.5270	-.4690	-.3850			-.1570
7.000		.1390	.0400	-.1220	-.1460	-.3440	-.1770	-.1490		
9.000		.1560	.1090	-.1690	-.2110	-.3550	-.2120	-.1410		
105.000				-.1130	-.3820	-.3760	-.2640	-.1760		
110.000									-.2820	
120.000		.1210	.2120	-.1350	-.7030	-.4910	-.3360	-.2770	-.2850	
135.000				.5640	-.1470	-.7480	-.6960	-.4470		
150.000		.1350	.2390	.4290	.3670	-.2690	-.3520	-.4040		
165.000		.0730		.3790	.3220	-.2190	-.2770	-.2580		
180.000		.1410	.2480	.3040						

DATE 17 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPB48)

AMES 11-7U7 OA12 O2A ORBITER FUSELAGE

MACH (2) = .9UU BETA (4) = 1U.3UU

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.UUUU	.UU75	.U188	.U339	.U6U2	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.32UU	.3953	.512U
PHI															
.UUU	.UUUU	.UUUU	.UUUU	-.688U	-.684U	-.139U			-.159U		-.223U	-.124U	-.U75U	-.U56U	-.U72U
2U.UUU	.UUUU		-.631U	-.695U	-.696U	-.U83U			-.122U		-.195U				
4U.UUU	.UUUU		-.568U	-.9UUU	-.618U	-.142U			-.2U5U		-.3U9U	-.128U	-.U56U	-.U22U	-.U23U
55.UUU	.UUUU		-.527U	-.878U	-.551U	-.224U			-.3U1U		-.481U				
7U.UUU	.UUUU		-.478U	-.875U	-.472U	-.229U			-.355U		-.626U	-.271U	-.U1UU	.U77U	.129U
9U.UUU	.UUUU	.285U	-.368U	-.865U	-.639U	-.386U			-.51UU		-.669U	-.249U	-.U54U	.U37U	.U99U
1U5.UUU	.UUUU														
11U.UUU	.UUUU								-.734U		-.883U	-.278U	-.135U	-.1U1U	-.U14U
12U.UUU	.UUUU		-.U86U	-.376U	-.337U	-.386U									
135.UUU	.UUUU									-1.234U					
142.UUU	.UUUU								-.U61U		-1.U34U	-.276U	-.U38U	-.U14U	-.166U
15U.UUU	.UUUU		.239U	.U67U	.U83U	.152U		.U41U							
157.UUU	.UUUU								-.148U		-1.U84U	-.383U	-.U65U	-.231U	-.146U
162.UUU	.UUUU														
165.UUU	.UUUU								.1U7U						
169.UUU	.UUUU						.657U								
172.UUU	.UUUU								.449U		-.721U	-.421U	-.U85U	-.U69U	-.U13U
18U.UUU	.UUUU	.931U	.476U	.378U	.397U	.673U									
X/LB	.5873	.6626	.738U	.7869	.8283	.8848	.9262	.9639	1.UU15	1.U392					
PHI															
.UUU	-.128U							-.2U4U		-.2258					
4U.UUU	-.U49U	-.249U		-.482U	-.529U	-.4U1U	-.219U			-.191U					
7U.UUU		.1U5U	-.UU3U	-.184U	-.213U	-.5UUU	-.349U	-.199U							
9U.UUU		.115U	.U55U	-.133U	-.294U	-.487U	-.4U7U	-.2U9U							
1U5.UUU				-.153U	-.417U	-.516U	-.438U	-.236U							
11U.UUU									-.253U						
12U.UUU		.U89U	.14UU	-.186U	-.8U9U	-.667U	-.573U	-.456U	-.341U						
135.UUU				.379U	-.137U	-.966U	-1.UU9U	-.579U							
15U.UUU		-.U46U	.112U	.262U	.228U	-.361U	-.52UU	-.549U							
165.UUU		-.U43U		.252U	.18UU	-.351U	-.416U	-.251U							
18U.UUU		.U35U	.U95U	.153U											

AMES 11-7?? OA12 O2A ORBITER BASE (PBPCL1) (01 MAY 73)

REFERENCE DATA

SREF = 2.421? SQ.FT. XMRP = 28.53?? INCHES
LREF = 39.?49? INCHES YMRP = .???? INCHES
BREF = 39.?49? INCHES ZMRP = .???? INCHES
SCALE = .?3??? SCALE

PARAMETRIC DATA

BETA = .??? RUDDER = .???
ELEVON = .??? AILRON = .???

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .6?? ALPHA (1) = -4.41?

TAP NO	7.???	8.???	9.???	11.???	12.???	13.???	14.???	15.???	16.???
A									
.???	-.2260	-.2310	-.1860	-.1820	-.2120	-.1980	-.1640	-.1880	-.1880

MACH (1) = .599 ALPHA (2) = .03?

TAP NO	7.???	8.???	9.???	11.???	12.???	13.???	14.???	15.???	16.???
A									
.???	-.2160	-.2110	-.1790	-.1850	-.2020	-.1820	-.1530	-.1810	-.1810

MACH (1) = .6?? ALPHA (3) = 5.03?

TAP NO	7.???	8.???	9.???	11.???	12.???	13.???	14.???	15.???	16.???
A									
.???	-.2140	-.2070	-.1720	-.1840	-.2060	-.1810	-.1550	-.1820	-.1820

MACH (1) = .6?? ALPHA (4) = 10.04?

TAP NO	7.???	8.???	9.???	11.???	12.???	13.???	14.???	15.???	16.???
A									
.???	-.2090	-.2130	-.1720	-.1860	-.2060	-.1880	-.1440	-.1830	-.1830

MACH (1) = .598 ALPHA (5) = 15.02?

TAP NO	7.???	8.???	9.???	11.???	12.???	13.???	14.???	15.???	16.???
A									
.???	-.2500	-.2430	-.2210	-.2250	-.2480	-.2340	-.1920	-.2290	-.2290

MACH (1) = .599 ALPHA (6) = 20.1??

TAP NO	7.???	8.???	9.???	11.???	12.???	13.???	14.???	15.???	16.???
A									
.???	-.3130	-.3130	-.2730	-.2410	-.3040	-.2910	-.2460	-.2790	-.2790

MACH (1) = .597 ALPHA (7) = 22.58?

TAP NO	7.???	8.???	9.???	11.???	12.???	13.???	14.???	15.???	16.???
A									
.???	-.3500	-.3480	-.3160	-.2740	-.3430	-.3320	-.2940	-.3110	-.3110

MACH (2) = .9?5 ALPHA (1) = -4.56?

TAP NO	7.???	8.???	9.???	11.???	12.???	13.???	14.???	15.???	16.???
A									
.???	-.2310	-.2210	-.2140	-.2110	-.2290	-.2200	-.1990	-.2140	-.2140

MACH (2) = .9?1 ALPHA (2) = -.01?

TAP NO	7.???	8.???	9.???	11.???	12.???	13.???	14.???	15.???	16.???
A									
.???	-.2230	-.2150	-.2060	-.2040	-.2230	-.2150	-.1920	-.2080	-.2080

MACH (2) = .9?4 ALPHA (3) = 4.98?

TAP NO	7.???	8.???	9.???	11.???	12.???	13.???	14.???	15.???	16.???
A									
.???	-.2160	-.2180	-.1850	-.2060	-.2050	-.2060	-.1670	-.1900	-.1900

AMES 11-7x7 OA12 02A ORBITER BASE (FBPC01)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (2) = .906 ALPHA (4) = 9.99D

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A .000	-.230D	-.232D	-.197D	-.234D	-.234D	-.216D	-.176D	-.213D	-.213D

MACH (2) = .901 ALPHA (5) = 14.99D

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A .000	-.294D	-.278D	-.252D	-.304D	-.298D	-.275D	-.251D	-.277D	-.277D

MACH (2) = .900 ALPHA (6) = 20.02D

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A .000	-.362D	-.366D	-.318D	-.353D	-.358D	-.335D	-.269D	-.323D	-.323D

MACH (2) = .902 ALPHA (7) = 25.04D

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A .000	-.559D	-.565D	-.492D	-.484D	-.524D	-.512D	-.471D	-.495D	-.495D

AMES 11-7X7 OA12 02A ORBITER BASE (PBPCU12) 13 MAY 73

REFERENCE DATA

SREF = 2.421E 00 SQ.FT. XMRP = 28.533E 00 INCHES
LREF = 39.849E 00 INCHES YMRP = .000E 00 INCHES
BREF = 39.849E 00 INCHES ZMRP = .000E 00 INCHES
SCALE = .03E 00 SCALE

PARAMETRIC DATA

ALPHA = .00E 00 RUDDER = .00E 00
ELEVON = .00E 00 FLAP = .00E 00

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) =-10.04E 00

TAP NO	7.144	8.144	9.144	11.144	12.144	13.144	14.144	15.144	16.144
A									
.144	-.211E 00	-.219E 00	-.181E 00	-.268E 00	-.215E 00	-.182E 00	-.212E 00	-.205E 00	-.205E 00

MACH (1) = .598 BETA (2) = -4.96E 00

TAP NO	7.144	8.144	9.144	11.144	12.144	13.144	14.144	15.144	16.144
A									
.144	-.197E 00	-.214E 00	-.171E 00	-.237E 00	-.213E 00	-.182E 00	-.161E 00	-.187E 00	-.187E 00

MACH (1) = .598 BETA (3) = 5.23E 00

TAP NO	7.144	8.144	9.144	11.144	12.144	13.144	14.144	15.144	16.144
A									
.144	-.235E 00	-.235E 00	-.191E 00	-.213E 00	-.218E 00	-.246E 00	-.161E 00	-.194E 00	-.194E 00

MACH (1) = .599 BETA (4) = 10.37E 00

TAP NO	7.144	8.144	9.144	11.144	12.144	13.144	14.144	15.144	16.144
A									
.144	-.261E 00	-.261E 00	-.219E 00	-.241E 00	-.245E 00	-.229E 00	-.173E 00	-.216E 00	-.216E 00

MACH (2) = .394 BETA (1) =-10.15E 00

TAP NO	7.144	8.144	9.144	10.144	12.144	13.144	14.144	15.144	16.144
A									
.144	-.255E 00	-.252E 00	-.225E 00	-.299E 00	-.286E 00	-.234E 00	-.225E 00	-.242E 00	-.242E 00

MACH (2) = .393 BETA (2) = -5.04E 00

TAP NO	7.144	8.144	9.144	11.144	12.144	13.144	14.144	15.144	16.144
A									
.144	-.223E 00	-.229E 00	-.205E 00	-.247E 00	-.241E 00	-.215E 00	-.169E 00	-.211E 00	-.211E 00

MACH (2) = .393 BETA (3) = 5.29E 00

TAP NO	7.144	8.144	9.144	11.144	12.144	13.144	14.144	15.144	16.144
A									
.144	-.234E 00	-.226E 00	-.211E 00	-.241E 00	-.225E 00	-.223E 00	-.197E 00	-.215E 00	-.215E 00

MACH (2) = .393 BETA (4) = 10.51E 00

TAP NO	7.144	8.144	9.144	11.144	12.144	13.144	14.144	15.144	16.144
A									
.144	-.273E 00	-.268E 00	-.253E 00	-.278E 00	-.268E 00	-.255E 00	-.218E 00	-.242E 00	-.242E 00

AMES 11-7X7 OA12 OBA ORBITER BASE (RBPCU3) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.6490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHE
SCALE = .0310 SCALE

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .596 BETA (1) =-10.080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2390	-.2480	-.1910	-.2640	-.2300	-.2010	-.1870	-.2170	-.2170

MACH (1) = .599 BETA (2) = -4.990

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2110	-.2070	-.1710	-.2390	-.2140	-.1810	-.1580	-.1970	-.1970

MACH (1) = .598 BETA (3) = 5.190

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2350	-.2420	-.1840	-.2150	-.2250	-.1990	-.1610	-.1920	-.1920

MACH (1) = .598 BETA (4) = 10.300

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2440	-.2460	-.2130	-.2440	-.2470	-.2320	-.1730	-.2140	-.2140

MACH (2) = .904 BETA (1) =-10.210

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2560	-.2700	-.2320	-.2830	-.2880	-.2310	-.2170	-.2430	-.2430

MACH (2) = .900 BETA (2) = -5.070

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2230	-.2190	-.1970	-.2430	-.2410	-.2060	-.1820	-.2110	-.2110

MACH (2) = .901 BETA (3) = 5.250

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2250	-.2170	-.2060	-.2380	-.2290	-.2090	-.1820	-.2050	-.2050

MACH (2) = .904 BETA (4) = 10.430

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2640	-.2620	-.2420	-.2860	-.2730	-.2530	-.2140	-.2480	-.2480

AMES 11-7X7 OA12 02A ORBITER BASE (RBP204) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.530[illegible] INCHES
LREF = 39.849[illegible] INCHES YMRP = .0000 INCHES
BREF = 39.849[illegible] INCHES ZMRP = .0000 INCHES
SCALE = .03[illegible] SCALE

PARAMETRIC DATA

ALPHA = 10.000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) =-10.11[illegible]

TAP NO	7.1[illegible]	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2600	-.2720	-.2110	-.2650	-.2290	-.2150	-.1900	-.2250	-.2250

MACH (1) = .598 BETA (2) = -5.02[illegible]

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2380	-.2390	-.1930	-.2480	-.2310	-.2010	-.1600	-.2030	-.2030

MACH (1) = .596 BETA (3) = 5.17[illegible]

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2360	-.2270	-.1950	-.2420	-.2390	-.2110	-.1620	-.2030	-.2030

MACH (1) = .597 BETA (4) = 10.27[illegible]

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2480	-.2260	-.2170	-.2640	-.2620	-.2460	-.1910	-.2370	-.2370

MACH (2) = .902 BETA (1) =-10.23[illegible]

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2830	-.2880	-.2410	-.2880	-.2870	-.2600	-.2220	-.2510	-.251[illegible]

MACH (2) = .900 BETA (2) = -5.07[illegible]

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2410	-.2360	-.2060	-.2500	-.2520	-.2230	-.1940	-.2250	-.2250

MACH (2) = .902 BETA (3) = 5.23[illegible]

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2410	-.2330	-.2100	-.2460	-.2380	-.2240	-.1970	-.2250	-.2250

MACH (2) = .907 BETA (4) = 10.39[illegible]

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2660	-.2590	-.2500	-.2800	-.2680	-.2510	-.2130	-.2480	-.2480

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES I -7X7 OA12 .02A ORBITER BASE (REPROD: 01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.530[illegible] INCHES
LREF = 39.849[illegible] INCHES YMRP = .000[illegible] INCHES
BREF = 39.849[illegible] INCHES ZMRP = .000[illegible] INCHES
SCALE = .0[illegible] SCALE

PARAMETRIC DATA

ALPHA = 15.000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

SECTION (1)ORBITER BASE

DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) =-10.09[illegible]

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A .000	-.288[illegible]	-.284[illegible]	-.247[illegible]	-.282[illegible]	-.266[illegible]	-.254[illegible]	-.211[illegible]	-.256[illegible]	-.256[illegible]

MACH (1) = .598 BETA (2) = -5.14[illegible]

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A .000	-.261[illegible]	-.263[illegible]	-.224[illegible]	-.261[illegible]	-.255[illegible]	-.234[illegible]	-.196[illegible]	-.234[illegible]	-.234[illegible]

MACH (1) = .596 BETA (3) = 5.18[illegible]

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A .000	-.237[illegible]	-.232[illegible]	-.202[illegible]	-.247[illegible]	-.255[illegible]	-.231[illegible]	-.196[illegible]	-.228[illegible]	-.228[illegible]

MACH (1) = .6[illegible] BETA (4) = 10.29[illegible]

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A .000	-.251[illegible]	-.229[illegible]	-.238[illegible]	-.272[illegible]	-.276[illegible]	-.259[illegible]	-.217[illegible]	-.256[illegible]	-.256[illegible]

MACH (2) = .9[illegible] BETA (1) =-10.20[illegible]

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A .000	-.319[illegible]	-.315[illegible]	-.289[illegible]	-.326[illegible]	-.317[illegible]	-.289[illegible]	-.259[illegible]	-.284[illegible]	-.284[illegible]

MACH (2) = .902 BETA (2) = -5.05[illegible]

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A .000	-.298[illegible]	-.317[illegible]	-.259[illegible]	-.305[illegible]	-.282[illegible]	-.264[illegible]	-.227[illegible]	-.259[illegible]	-.259[illegible]

MACH (2) = .9[illegible] BETA (3) = 5.22[illegible]

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A .000	-.267[illegible]	-.253[illegible]	-.252[illegible]	-.289[illegible]	-.283[illegible]	-.253[illegible]	-.241[illegible]	-.269[illegible]	-.269[illegible]

MACH (2) = .9[illegible] BETA (4) = 10.39[illegible]

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A .000	-.259[illegible]	-.246[illegible]	-.263[illegible]	-.326[illegible]	-.291[illegible]	-.256[illegible]	-.257[illegible]	-.281[illegible]	-.281[illegible]

AMES 11-7U7 OA12 O2A ORBITER BASE (FBFC06) [illegible]

REFERENCE DATA

SREF = [illegible] SQ.FT. XMRP = 28.530 INCHES
LREF = [illegible] INCHES YMRP = .000 INCHES
BREF = [illegible] INCHES ZMRP = .000 INCHES
SCALE = [illegible] SCALE

PARAMETRIC DATA

ALPHA = [illegible] RUDDER = [illegible]
ELEVON = .000 RUDFLR = [illegible]

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .596 BETA (1) =-10.03

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.348	-.338	-.293	-.305	-.299	-.293	-.266	-.283	-.283

MACH (1) = .597 BETA (2) = -4.97

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.298	-.311	-.276	-.296	-.295	-.273	-.246	-.274	-.274

MACH (1) = .597 BETA (3) = 5.21

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.258	-.231	-.248	-.294	-.291	-.256	-.260	-.275	-.275

MACH (1) = .599 BETA (4) = 10.36

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.279	-.284	-.276	-.308	-.299	-.298	-.267	-.289	-.289

MACH (2) = .902 BETA (1) =-10.11

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.407	-.432	-.343	-.353	-.364	-.359	-.322	-.335	-.335

MACH (2) = .900 BETA (2) = -5.02

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.399	-.426	-.333	-.369	-.363	-.355	-.317	-.336	-.336

MACH (2) = .904 BETA (3) = 5.26

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.273	-.262	-.287	-.369	-.357	-.287	-.301	-.326	-.326

MACH (2) = .905 BETA (4) = 10.43

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.265	-.251	-.304	-.379	-.355	-.285	-.312	-.327	-.327

AMES 11-7.7 OA12 OEA ORBITER BASE (RBPC07) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.53[illegible] INCHES
LREF = 39.849[illegible] INCHES YMRP = .[illegible] INCHES
BREF = 39.849[illegible] INCHES ZMRP = .[illegible] INCHES
SCALE = .03[illegible] SCALE

PARAMETRIC DATA

ALPHA = .000 RUDDER = -10.000
ELEVON = .000 RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -7.980

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.1780	-.1670	-.1800	-.2540	-.2110	-.1860	-.1990	-.2120	-.2120

MACH (1) = .600 BETA (2) = -3.940

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.1960	-.1910	-.1760	-.2310	-.2010	-.1810	-.1780	-.1920	-.1920

MACH (1) = .600 BETA (3) = .090

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2050	-.2040	-.1830	-.1870	-.2060	-.1940	-.1690	-.1890	-.1890

MACH (1) = .599 BETA (4) = 4.210

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2280	-.2180	-.1880	-.1970	-.2240	-.2070	-.1620	-.1940	-.1940

MACH (1) = .597 BETA (5) = 8.320

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2370	-.2340	-.2120	-.2390	-.2340	-.2220	-.1760	-.2070	-.2070

MACH (2) = .902 BETA (1) = -8.090

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2480	-.2450	-.2310	-.2690	-.2690	-.2270	-.2260	-.2360	-.2360

MACH (2) = .901 BETA (2) = -4.000

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2230	-.2140	-.2170	-.2390	-.2330	-.2180	-.1950	-.2150	-.2150

MACH (2) = .903 BETA (3) = .090

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2130	-.2160	-.2090	-.2060	-.2210	-.2160	-.2010	-.2150	-.2150

MACH (2) = .902 BETA (4) = 4.260

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2200	-.2240	-.2120	-.2370	-.2320	-.2270	-.1980	-.2210	-.2210

MACH (2) = .905 BETA (5) = 8.440

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2580	-.2620	-.2500	-.2730	-.2680	-.2550	-.2250	-.2490	-.2490

AMES 11-FT OA12 O2A ORBITER BASE (RBPC08) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.849[illegible] INCHES YMRP = .0000 INCHES
BREF = 39.849[illegible] INCHES ZMRP = .0000 INCHES
SCALE = .03[illegible] SCALE

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = -15.000
ELEVON = .000 RUDFLP = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -8.040

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
	.000	-.2440	-.2030	-.1740	-.2450	-.2160	-.1820	-.1780	-.2030	-.2030

MACH (1) = .599 BETA (2) = -3.970

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
	.000	-.2040	-.1760	-.1700	-.2330	-.2090	-.1830	-.1720	-.1990	-.1990

MACH (1) = .604 BETA (3) = .090

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
	.000	-.1970	-.1960	-.1730	-.1910	-.2080	-.1920	-.1650	-.1950	-.1960

MACH (1) = .601 BETA (4) = 4.180

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
	.000	-.2290	-.2120	-.1850	-.2100	-.2280	-.2100	-.1730	-.1950	-.1950

MACH (1) = .601 BETA (5) = 8.260

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
	.000	-.2230	-.2120	-.2010	-.2340	-.2380	-.2110	-.1760	-.2070	-.2070

MACH (2) = .900 BETA (1) = -8.140

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
	.000	-.2360	-.2180	-.2110	-.2620	-.2620	-.2190	-.2030	-.2360	-.2360

MACH (2) = .903 BETA (2) = -4.030

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
	.000	-.2140	-.1910	-.1940	-.2360	-.2170	-.1820	-.1740	-.1990	-.1990

MACH (2) = .901 BETA (3) = .090

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
	.000	-.2060	-.1960	-.1880	-.2070	-.2150	-.1950	-.1720	-.1970	-.1970

MACH (2) = .903 BETA (4) = 4.220

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
	.000	-.2320	-.2170	-.2040	-.2340	-.2230	-.2130	-.1790	-.2090	-.2090

MACH (2) = .901 BETA (5) = 8.370

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
	.000	-.2440	-.2350	-.2280	-.2620	-.2580	-.2420	-.2070	-.2320	-.2320

AMES 11-FT OA12 OBA ORBITER BASE (RBPCU9) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 2[illegible] INCHES
LREF = 39.849[illegible] INCHES YMRP = [illegible] INCHES
BREF = 39.849[illegible] INCHES ZMRP = [illegible] INCHES
SCALE = .03[illegible] SCALE

PARAMETRIC DATA

ALPHA = 10.000 RUDDER = -15.000
ELEVON = .000 RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -8.060

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2320	-.2180	-.1930	-.2600	-.2370	-.2050	-.1810	-.2110	-.2110

MACH (1) = .601 BETA (2) = -3.980

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2230	-.2130	-.1870	-.2540	-.2260	-.2030	-.1800	-.2050	-.2050

MACH (1) = .500 BETA (3) = .090

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.1930	-.1870	-.1770	-.1970	-.2090	-.1970	-.1730	-.1980	-.1980

MACH (1) = .599 BETA (4) = 4.170

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.1930	-.1830	-.1880	-.2260	-.2310	-.2080	-.1700	-.1990	-.1990

MACH (1) = .599 BETA (5) = 8.240

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2040	-.1990	-.1970	-.2410	-.2390	-.2170	-.1850	-.2080	-.2080

MACH (2) = .904 BETA (1) = -8.160

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2500	-.2540	-.2340	-.2620	-.2550	-.2380	-.2070	-.2330	-.2330

MACH (2) = .902 BETA (2) = -4.040

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2300	-.2270	-.2110	-.2460	-.2430	-.2260	-.2000	-.2300	-.2300

MACH (2) = .899 BETA (3) = .090

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2080	-.2020	-.1990	-.2340	-.2380	-.2120	-.1880	-.2170	-.2170

MACH (2) = .898 BETA (4) = 4.200

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2350	-.2190	-.2080	-.2480	-.2440	-.2300	-.1930	-.2280	-.2280

MACH (2) = .900 BETA (5) = 8.330

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2350	-.2250	-.2220	-.2630	-.2560	-.2420	-.2170	-.2450	-.2450

AMES 11-FT OA12 OBA ORBITER BASE (PBPCOL) (01 MAY 73)

REFERENCE DATA

SREF = 2.421E 03 SQ.FT. XMRP = 28.53[illegible] INCHES
LREF = 39.849[illegible] INCHES YMRP = .[illegible] INCHES
BREF = 39.849[illegible] INCHES ZMRP = .[illegible] INCHES
SCALE = .[illegible] SCALE

PARAMETRIC DATA

ALPHA = 15.[illegible] RUDDER = -1[illegible]
ELEVON = .[illegible] RUDFLR = .[illegible]

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .398 BETA (1) = -8.04D

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A .[illegible]	-.261D	-.259D	-.232D	-.270D	-.260D	-.244D	-.197D	-.245D	-.245D

MACH (1) = .399 BETA (2) = -3.98D

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A .[illegible]	-.255D	-.243D	-.215D	-.247D	-.243D	-.238D	-.2[illegible]D	-.228D	-.228D

MACH (1) = .598 BETA (3) = .08D

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A .[illegible]	-.238D	-.230D	-.218D	-.235D	-.260D	-.247D	-.215D	-.244D	-.244D

MACH (1) = .596 BETA (4) = 4.17D

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A .[illegible]	-.213D	-.211D	-.208D	-.266D	-.259D	-.230D	-.214D	-.247D	-.247D

MACH (1) = .601 BETA (5) = 8.25D

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A .[illegible]	-.242D	-.221D	-.231D	-.274D	-.267D	-.247D	-.229D	-.251D	-.251D

MACH (2) = .902 BETA (1) = -9.13D

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A .[illegible]	-.292D	-.288D	-.264D	-.313D	-.293D	-.273D	-.237D	-.266D	-.266D

MACH (2) = .899 BETA (2) = -4.42D

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A .[illegible]	-.282D	-.306D	-.254D	-.296D	-.285D	-.266D	-.232D	-.264D	-.264D

MACH (2) = .901 BETA (3) = .08D

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A .[illegible]	-.262D	-.241D	-.236D	-.283D	-.284D	-.251D	-.235D	-.263D	-.263D

MACH (2) = .901 BETA (4) = 4.29D

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A .[illegible]	-.242D	-.229D	-.245D	-.303D	-.289D	-.244D	-.241D	-.264D	-.264D

MACH (2) = .900 BETA (5) = 8.33D

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A .[illegible]	-.245D	-.234D	-.262D	-.328D	-.305D	-.269D	-.255D	-.281D	-.281D

AMES 11-7X7 OA12 OBA ORBITER BASE (RBPC11) (01 MAY 73)

REFERENCE DATA

SREF = 2.421U SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.849U INCHES YMRP = .0000 INCHES
BREF = 39.849U INCHES ZMRP = .0000 INCHES
SCALE = 1.000 SCALE

PARAMETRIC DATA

ALPHA = 20.000 RUDDER = -10.000
ELEVON = .000 RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -7.990

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3090	-.3190	-.2800	-.2920	-.2900	-.2790	-.2610	-.2780	-.2780

MACH (1) = .598 BETA (2) = -3.960

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2860	-.2920	-.2720	-.2940	-.2770	-.2760	-.2450	-.2670	-.2670

MACH (1) = .598 BETA (3) = .090

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2840	-.2610	-.2720	-.2660	-.3040	-.2900	-.2700	-.2840	-.2840

MACH (1) = .598 BETA (4) = 4.190

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2310	-.2250	-.2460	-.2800	-.2930	-.2580	-.2700	-.2800	-.2800

MACH (1) = .600 BETA (5) = 8.310

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2700	-.2480	-.2570	-.2920	-.3000	-.2780	-.2710	-.2910	-.2910

MACH (2) = .900 BETA (1) = -8.060

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.4000	-.4420	-.3370	-.3630	-.3590	-.3550	-.3040	-.3320	-.3320

MACH (2) = .900 BETA (2) = -3.980

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.4010	-.4370	-.3260	-.3650	-.3650	-.3500	-.2930	-.3360	-.3360

MACH (2) = .900 BETA (3) = .090

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3300	-.3230	-.3040	-.3640	-.3580	-.3150	-.2930	-.3310	-.3310

MACH (2) = .900 BETA (4) = 4.230

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2810	-.2770	-.3010	-.3650	-.3620	-.3040	-.3080	-.3320	-.3320

MACH (2) = .901 BETA (5) = 8.360

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2840	-.2700	-.3210	-.3700	-.3650	-.3050	-.3220	-.3340	-.3340

AMES 11-7:7 OA12 OBA ORBITER BASE (RBPC12) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.5390 INCHES
LREF = 39.849[illegible] INCHES YMRP = .0000 INCHES
BREF = 39.849[illegible] INCHES ZMRP = .0000 INCHES
SCALE = .03[illegible] SCALE

PARAMETRIC DATA

ALPHA = .000 RUDDER = -20.000
ELEVON = .000 RUDFLP = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -7.970

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.1940	-.1770	-.2070	-.2640	-.2230	-.2040	-.2180	-.2280	-.2280

MACH (1) = .600 BETA (2) = -3.930

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2120	-.1950	-.2050	-.2610	-.2250	-.2130	-.2110	-.2240	-.2240

MACH (1) = .599 BETA (3) = .100

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2180	-.2100	-.2050	-.2060	-.2330	-.2150	-.1990	-.2120	-.2120

MACH (1) = .601 BETA (4) = 4.210

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2370	-.2230	-.2130	-.2430	-.2500	-.2390	-.2010	-.2330	-.2330

MACH (1) = .598 BETA (5) = 8.330

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2490	-.2380	-.2380	-.2560	-.2520	-.2520	-.2210	-.2350	-.2350

MACH (2) = .901 BETA (1) = -8.080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2410	-.2380	-.2260	-.2680	-.2700	-.2250	-.2230	-.2390	-.2390

MACH (2) = .900 BETA (2) = -4.000

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2450	-.2310	-.2320	-.2740	-.2610	-.2400	-.2200	-.2310	-.2310

MACH (2) = .900 BETA (3) = .100

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2290	-.2240	-.2290	-.2210	-.2420	-.2400	-.2250	-.2340	-.2340

MACH (2) = .900 BETA (4) = 4.280

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2370	-.2310	-.2360	-.2540	-.2480	-.2540	-.2290	-.2410	-.2410

MACH (2) = .903 BETA (5) = 8.450

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2910	-.2890	-.2900	-.2940	-.2930	-.2850	-.2670	-.2720	-.2720

AMES 11-7U7 OA12 02A ORBITER BASE (RBPC13) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.849[illegible] INCHES YMRP = .0000 INCHES
BREF = 39.849[illegible] INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = -20.000
ELEVON = .000 RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -8.030

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2090	-.1960	-.2020	-.2670	-.2330	-.2140	-.2090	-.2290	-.2290

MACH (1) = .599 BETA (2) = -3.970

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.1970	-.1740	-.1890	-.2530	-.2290	-.2060	-.2110	-.2180	-.2180

MACH (1) = .598 BETA (3) = .100

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2070	-.1840	-.1950	-.2150	-.2310	-.2230	-.2060	-.2170	-.2170

MACH (1) = .599 BETA (4) = 4.180

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2230	-.2080	-.2080	-.2340	-.2400	-.2230	-.1990	-.2220	-.2220

MACH (1) = .600 BETA (5) = 8.270

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2450	-.2270	-.2240	-.2540	-.2580	-.2370	-.2170	-.2320	-.2320

MACH (2) = .907 BETA (1) = -8.140

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2370	-.2250	-.2160	-.2540	-.2460	-.2130	-.2060	-.2250	-.2250

MACH (2) = .899 BETA (2) = -4.020

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2280	-.2030	-.2140	-.2630	-.2480	-.2170	-.2070	-.2270	-.2270

MACH (2) = .901 BETA (3) = .100

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2090	-.1890	-.2020	-.2130	-.2270	-.2210	-.2010	-.2140	-.2140

MACH (2) = .903 BETA (4) = 4.230

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2370	-.2370	-.2210	-.2570	-.2460	-.2360	-.2080	-.2370	-.2370

MACH (2) = .902 BETA (5) = 8.380

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2670	-.2590	-.2620	-.2840	-.2760	-.2660	-.2530	-.2620	-.2620

AMES 11-7X7 OA12 O2A ORBITER BASE (RBPC14) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5350 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 10.000 RUDDER = -20.000
ELEVON = .000 RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -8.060

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2330	-.2320	-.2.50	-.2800	-.2460	-.2300	-.2100	-.2410	-.2410

MACH (1) = .600 BETA (2) = -3.980

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2270	-.2100	-.2050	-.2730	-.2450	-.2270	-.2040	-.2320	-.2320

MACH (1) = .599 BETA (3) = .030

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2050	-.1860	-.1910	-.2200	-.2370	-.2260	-.2030	-.2180	-.2180

MACH (1) = .599 BETA (4) = 4.170

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2070	-.1930	-.1940	-.2400	-.2500	-.2170	-.2000	-.2260	-.2260

MACH (1) = .602 BETA (5) = 8.250

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2300	-.2050	-.2160	-.2660	-.2570	-.2400	-.2030	-.2340	-.2340

MACH (2) = .902 BETA (1) = -8.150

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2700	-.2650	-.2410	-.2800	-.2750	-.2460	-.2280	-.2510	-.2510

MACH (2) = .901 BETA (2) = -4.040

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2470	-.2340	-.2260	-.2800	-.2660	-.2440	-.2190	-.2470	-.2470

MACH (2) = .899 BETA (3) = .090

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2190	-.1980	-.2200	-.2620	-.2670	-.2410	-.2210	-.2420	-.2420

MACH (2) = .900 BETA (4) = 4.210

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2260	-.2140	-.2260	-.2670	-.2640	-.2380	-.2240	-.2480	-.2480

MACH (2) = .906 BETA (5) = 8.350

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2630	-.2460	-.2640	-.2820	-.2800	-.2700	-.2480	-.2760	-.2760

AMES 11-7U7 OA12 OBA ORBITER BASE (RBPC15) (01 MAY 73)

REFERENCE DATA

SREF = 2.421. SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .130. SCALE

PARAMETRIC DATA

ALPHA = 15.00. RUDDER = -20.00.
ELEVON = .000 RUDFLR = .00.

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .60. BETA (1) = -8.040

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2810	-.2770	-.2520	-.2980	-.2770	-.2710	-.2350	-.2650	-.2650

MACH (1) = .599 BETA (2) = -3.970

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2640	-.2650	-.2460	-.2700	-.2700	-.2670	-.2420	-.2600	-.2600

MACH (1) = .600 BETA (3) = .100

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2380	-.2390	-.2410	-.2520	-.2780	-.2620	-.2550	-.2670	-.2670

MACH (1) = .598 BETA (4) = 4.180

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2190	-.1950	-.2240	-.2760	-.2700	-.2450	-.2430	-.2570	-.2570

MACH (1) = .599 BETA (5) = 8.260

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2450	-.2260	-.2460	-.2880	-.2910	-.2640	-.2530	-.2690	-.2690

MACH (2) = .901 BETA (1) = -8.120

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3250	-.3180	-.2840	-.3430	-.3320	-.2990	-.2630	-.2880	-.2880

MACH (2) = .900 BETA (2) = -4.010

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3050	-.3250	-.2750	-.3220	-.3140	-.2950	-.2580	-.2890	-.2890

MACH (2) = .899 BETA (3) = .090

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2630	-.2520	-.2610	-.3260	-.3190	-.2840	-.2810	-.3030	-.3030

MACH (2) = .899 BETA (4) = 4.210

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2280	-.2200	-.2540	-.3130	-.2920	-.2540	-.2580	-.2710	-.2710

MACH (2) = .898 BETA (5) = 8.340

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2740	-.2570	-.2920	-.3440	-.3220	-.2970	-.2990	-.3090	-.3090

AMES 11-7U7 OA12 O2A ORBITER BASE (RBPC16) (02 MAY 73)

REFERENCE DATA

SREF = 2.421U SQ.FT. XMRP = 28.53U0 INCHES
LREF = 39.849U INCHES YMRP = .0000 INCHES
BREF = 39.849U INCHES ZMRP = .0000 INCHES
SCALE = .U3U0 SCALE

PARAMETRIC DATA

ALPHA = 2U.1UU RUDDER = -2U.UUU
ELEVON = .UUU RUDDLR = .UUU

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -7.99U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.332U	-.338U	-.3U3U	-.311U	-.3U4U	-.3U3U	-.277U	-.297U	-.297U

MACH (1) = .598 BETA (2) = -3.95U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.315U	-.3UUU	-.287U	-.315U	-.3U8U	-.3UUU	-.284U	-.299U	-.299U

MACH (1) = .6U1 BETA (3) = .1U0

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.293U	-.28UU	-.28UU	-.3U2U	-.336U	-.321U	-.318U	-.314U	-.314U

MACH (1) = .597 BETA (4) = 4.2UU

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.261U	-.252U	-.278U	-.3U4U	-.317U	-.279U	-.3U8U	-.3U8U	-.3U8U

MACH (1) = .6U4 BETA (5) = 8.32U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.277U	-.248U	-.28[illegible]	-.313U	-.317U	-.[illegible]92U	-.295U	-.3U4U	-.3U4U

MACH (2) = .898 BETA (1) = -8.U6U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.418U	-.437U	-.343U	-.359U	-.368U	-.364U	-.3U3U	-.344U	-.344U

MACH (2) = .897 BETA (2) = -3.98U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.4[illegible]U	-.442U	-.324U	-.377U	-.374U	-.364U	-.289U	-.341U	-.341U

MACH (2) = .897 BETA (3) = .09U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.343U	-.324U	-.333U	-.359U	-.369U	-.345U	-.341U	-.355U	-.355U

MACH (2) = .896 BETA (4) = 4.24U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.287U	-.293U	-.322U	-.38UU	-.363U	-.315U	-.334U	-.352U	-.352U

MACH (2) = .899 BETA (5) = 8.37U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.3U5U	-.282U	-.341U	-.363U	-.368U	-.327U	-.354U	-.355U	-.355U

AMES 11-7X7 OA12 02A ORBITER BASE (RBPC17) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.530[illegible] INCHES
LREF = 39.849[illegible] INCHES YMRP = .0000 INCHES
BREF = 54.849[illegible] INCHES ZMRP = .0000 INCHES
SCALE = .[illegible] SCALE

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000
ELEVON = 10.000 RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .597 BETA (1) =-10.000

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2540	-.2550	-.2180	-.3020	-.2670	-.2240	-.2300	-.2450	-.2450

MACH (1) = .598 BETA (2) = .080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2350	-.2350	-.2110	-.2210	-.2370	-.2190	-.1850	-.2090	-.2090

MACH (1) = .600 BETA (3) = 10.370

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2860	-.2860	-.2530	-.2770	-.2710	-.2570	-.2210	-.2410	-.2410

MACH (2) = .901 BETA (1) =-10.120

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2890	-.2870	-.2640	-.3250	-.3250	-.2660	-.2570	-.2780	-.2780

MACH (2) = .899 BETA (2) = .080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2440	-.2560	-.2350	-.2290	-.2430	-.2410	-.2250	-.2340	-.2340

MACH (2) = .903 BETA (3) = 10.490

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2920	-.2910	-.2770	-.3120	-.2950	-.2820	-.2490	-.2710	-.2710

AMES 11-7U7 OA12 02A ORBITER BASE (RBPC18) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.5300 INCHES
LREF = 19.849[illegible] INCHES YMRP = .0000 INCHES
BREF = 19.849[illegible] INCHES ZMRP = .0000 INCHES
SCALE = .0[illegible] SCALE

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000
ELEVON = 10.000 RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) =-10.070

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2500	-.2660	-.2190	-.2900	-.2730	-.2200	-.2240	-.2380	-.2380

MACH (1) = .596 BETA (2) = .080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2370	-.2300	-.2070	-.2270	-.2270	-.2150	-.1810	-.2150	-.2150

MACH (1) = .598 BETA (3) = 10.300

TAP NO	7.[illegible]00	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2760	-.2830	-.2550	-.2910	-.2900	-.2640	-.2230	-.2440	-.2440

MACH (2) = .899 BETA (1) =-10.190

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2870	-.2770	-.2540	-.3070	-.3090	-.2540	-.2360	-.2620	-.2620

MACH (2) = .901 BETA (2) = .080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2320	-.2320	-.2120	-.2180	-.2250	-.2210	-.2030	-.2190	-.2190

MACH (2) = .895 BETA (3) = 10.420

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2820	-.2750	-.2750	-.3050	-.2990	-.2790	-.2320	-.2650	-.2650

AMES 11-[illegible]7 OA12 02A ORBITER BASE (RBPC19) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .[illegible]300 SCALE

PARAMETRIC DATA

ALPHA = 10.000 RUDDER = .000
ELEVON = 10.000 RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) =-10.110

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2630	-.2950	-.2420	-.3010	-.2880	-.2310	-.2230	-.2370	-.2370

MACH (1) = .597 BETA (2) = .080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2400	-.2390	-.2020	-.2270	-.2320	-.2200	-.1770	-.2170	-.2170

MACH (1) = .599 BETA (3) = 10.270

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2750	-.2670	-.2500	-.2900	-.2850	-.2520	-.2100	-.2470	-.2470

MACH (2) = .904 BETA (1) =-10.210

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3200	-.3190	-.2860	-.3410	-.3330	-.2900	-.2450	-.2800	-.2800

MACH (2) = .898 BETA (2) = .090

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2690	-.2580	-.2390	-.2910	-.2850	-.2670	-.2290	-.2620	-.2620

MACH (2) = .897 BETA (3) = 10.390

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2930	-.2820	-.2720	-.3400	-.3130	-.2810	-.2410	-.2790	-.2790

AMES 11-7U7 OA12 OEA ORBITER BASE (RBPC2U) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.849[illegible] INCHES YMRP = .0000 INCHES
BREF = 39.849[illegible] INCHES ZMRP = .0000 INCHES
SCALE = ..3[illegible] SCALE

PARAMETRIC DATA

ALPHA = 15.000 RUDDER = .000
ELEVON = 10.000 RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) =-10.080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.284U	-.3[illegible]2U	-.277U	-.333U	-.333U	-.267U	-.25[illegible]U	-.275U	-.275U

MACH (1) = .599 BETA (2) = .080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.288U	-.307U	-.253U	-.272U	-.287U	-.267U	-.218U	-.268U	-.268U

MACH (1) = .599 BETA (3) = 10.290

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.296U	-.279U	-.257U	-.302U	-.308U	-.272U	-.227U	-.263U	-.263U

MACH (2) = .902 BETA (1) =-10.190

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.359U	-.344U	-.307U	-.375U	-.353U	-.327U	-.275U	-.311U	-.311U

MACH (2) = .902 BETA (2) = .070

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.295U	-.289U	-.271U	-.342U	-.319U	-.278U	-.240U	-.295U	-.295U

MACH (2) = .902 BETA (3) = 10.380

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.300U	-.259U	-.291U	-.360U	-.336U	-.294U	-.266U	-.296U	-.296U

AMES 11-7U7 OA12 O2A ORBITER BASE (RBPC21) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0500 SCALE

PARAMETRIC DATA

ALPHA = 20.000 RUDDER = .000
ELEVON = 10.000 RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) =-10.030

TAP NO A	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
.000	-.3560	-.3590	-.3280	-.3620	-.3540	-.3200	-.2980	-.3360	-.3360

MACH (1) = .601 BETA (2) = .070

TAP NO A	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
.000	-.3580	-.3470	-.2960	-.2880	-.3410	-.3150	-.2590	-.3030	-.3030

MACH (1) = .598 BETA (3) = 10.370

TAP NO A	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
.000	-.3290	-.3150	-.2890	-.3520	-.3530	-.3210	-.3040	-.3240	-.3240

MACH (2) = .902 BETA (1) =-10.100

TAP NO A	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
.000	-.4600	-.4920	-.4040	-.4180	-.4230	-.4130	-.3900	-.4080	-.4080

MACH (2) = .894 BETA (2) = .080

TAP NO A	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
.000	-.4130	-.4200	-.3660	-.4150	-.4130	-.3900	-.3360	-.3770	-.3770

MACH (2) = .901 BETA (3) = 10.420

TAP NO A	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
.000	-.3190	-.3090	-.3680	-.4330	-.4170	-.3290	-.3720	-.3920	-.3920

AMES 11-7U7 OA12 02A ORBITER BASE (RBPC22) (01 MAY 73)

REFERENCE DATA

SREF = 2.421U SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000
ELEVON = -10.000 RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -7.970

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2090	-.2320	-.1550	-.1880	-.2110	-.1740	-.1600	-.1900	-.1900

MACH (1) = .595 BETA (2) = -3.940

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2150	-.2090	-.1540	-.1820	-.1920	-.1730	-.1410	-.1740	-.1740

MACH (1) = .597 BETA (3) = .080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.1990	-.1980	-.1600	-.1710	-.1910	-.1710	-.1450	-.1680	-.1680

MACH (1) = .596 BETA (4) = 4.200

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2170	-.2160	-.1640	-.1840	-.2000	-.1840	-.1400	-.1780	-.1780

MACH (1) = .597 BETA (5) = 8.300

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2390	-.2370	-.1830	-.1950	-.2220	-.2040	-.1470	-.1880	-.1880

MACH (2) = .904 BETA (1) = -8.090

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2400	-.2340	-.1960	-.2380	-.2330	-.2170	-.2040	-.2200	-.2200

MACH (2) = .902 BETA (2) = -4.000

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2160	-.2110	-.1920	-.2190	-.2170	-.2080	-.1850	-.2110	-.2110

MACH (2) = .898 BETA (3) = .080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2130	-.2090	-.1890	-.2040	-.2120	-.2050	-.1670	-.1970	-.1970

MACH (2) = .899 BETA (4) = 4.250

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2310	-.2310	-.2050	-.2290	-.2340	-.2260	-.1830	-.2090	-.2090

MACH (2) = .900 BETA (5) = 8.410

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2300	-.2420	-.2240	-.2240	-.2400	-.2290	-.1890	-.2160	-.2160

DATE 18 SEP 79

TABULATED PRESSURE DATA (WING)

ARES II [illegible] (WING) DATA (WRITTEN MAR

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.59[illegible] INCHES
LREF = 39.849[illegible] INCHES YMRP = .[illegible] INCHES
BREF = 39.849[illegible] INCHES ZMRP = .[illegible] INCHES
SCALE = .03[illegible] SCALE

SECTION (1)ORBITER BASE

MACH (1) = .598 BETA (1) = -8.03[illegible]

MACH (1) = .598 BETA (2) = -3.97[illegible]

MACH (1) = .599 BETA (3) = .[illegible]

MACH (1) = .598 BETA (4) = 4.17[illegible]

MACH (1) = .596 BETA (5) = 8.29[illegible]

MACH (2) = .[illegible] BETA (1) = -8.1[illegible]

MACH (2) = .[illegible] BETA (2) = -4.[illegible]

MACH (2) = .[illegible] BETA (3) = .[illegible]

MACH (2) = .[illegible] BETA (4) = 4.[illegible]

MACH (2) = .[illegible] BETA (5) = 8.[illegible]

DIFFERENT VARIANT (P

AMES 11-7U7 OA12 OBA ORBITER BASE (RBPC24) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.530[illegible] INCHES
LREF = 39.849[illegible] INCHES YMRP = .0000 INCHES
BREF = 39.849[illegible] INCHES ZMRP = .0000 INCHES
SCALE = .[illegible] SCALE

PARAMETRIC DATA

ALPHA = 10.000 RUDDER = .000
ELEVON = -10.000 RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .597 BETA (1) = -8.060

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2620	-.2660	-.1960	-.2030	-.2340	-.2060	-.1590	-.2030	-.2030

MACH (1) = .599 BETA (2) = -3.990

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2390	-.2340	-.1680	-.1980	-.2110	-.1820	-.1360	-.1870	-.1870

MACH (1) = .600 BETA (3) = .080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2000	-.2000	-.1470	-.2020	-.2110	-.1690	-.1260	-.1730	-.1730

MACH (1) = .596 BETA (4) = 4.150

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2120	-.2140	-.1630	-.2060	-.2110	-.1940	-.1360	-.1780	-.1780

MACH (1) = .599 BETA (5) = 8.230

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2180	-.1940	-.1890	-.2010	-.2180	-.1990	-.1460	-.1950	-.1950

MACH (2) = .900 BETA (1) = -8.150

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2620	-.2610	-.2190	-.2620	-.2580	-.2440	-.2160	-.2420	-.2420

MACH (2) = .900 BETA (2) = -4.030

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2190	-.2110	-.1930	-.2350	-.2310	-.2130	-.1950	-.2180	-.2180

MACH (2) = .899 BETA (3) = .080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2190	-.2010	-.1920	-.2260	-.2290	-.2130	-.1780	-.2030	-.2030

MACH (2) = .902 BETA (4) = 4.190

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2330	-.2430	-.2110	-.2230	-.2290	-.2180	-.1850	-.2120	-.2120

MACH (2) = .900 BETA (5) = 8.330

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2270	-.2210	-.2210	-.2220	-.2490	-.2300	-.1910	-.2180	-.2180

AMES 11-7ft OA12 OBA ORBITER BASE (RBPC25) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 15.000 RUDDER = .000
ELEVON = -10.000 RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -8.040

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2760	-.2620	-.2190	-.2000	-.2520	-.2390	-.2040	-.2280	-.2280

MACH (1) = .598 BETA (2) = -3.990

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2440	-.2450	-.2050	-.1990	-.2280	-.2130	-.1750	-.2110	-.2110

MACH (1) = .597 BETA (3) = .080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2330	-.2540	-.2010	-.1960	-.2380	-.2150	-.1790	-.2080	-.2080

MACH (1) = .601 BETA (4) = 4.160

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2270	-.2290	-.2070	-.1940	-.2330	-.2230	-.1880	-.2090	-.2090

MACH (1) = .601 BETA (5) = 8.250

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2310	-.2320	-.2190	-.2070	-.2530	-.2310	-.2060	-.2250	-.2250

MACH (2) = .902 BETA (1) = -8.130

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2760	-.2780	-.2430	-.2550	-.2590	-.2540	-.2300	-.2480	-.2480

MACH (2) = .901 BETA (2) = -4.020

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2430	-.2640	-.2140	-.2370	-.2360	-.2250	-.2070	-.2300	-.2300

MACH (2) = .902 BETA (3) = .080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2400	-.2350	-.2070	-.2400	-.2490	-.2310	-.2060	-.2350	-.2350

MACH (2) = .898 BETA (4) = 4.190

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2400	-.2470	-.2230	-.2400	-.2430	-.2370	-.2060	-.2240	-.2240

MACH (2) = .899 BETA (5) = 8.330

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2490	-.2510	-.2430	-.2400	-.2600	-.2550	-.2220	-.2380	-.2380

AMES 11-7D7 OA12 O2A ORBITER BASE (RBPC26) (01 MAY 73)

REFERENCE DATA

SREF = 2.4219 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8499 INCHES YMRP = .0000 INCHES
BREF = 39.8499 INCHES ZMRP = .0000 INCHES
SCALE = .0350 SCALE

PARAMETRIC DATA

ALPHA = 20.000 RUDDER = .000
ELEVON = -10.000 RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .597 BETA (1) = -7.980

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3190	-.3360	-.2650	-.2130	-.3000	-.2730	-.2610	-.2620	-.2620

MACH (1) = .598 BETA (2) = -3.960

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2940	-.3210	-.2560	-.1950	-.2720	-.2590	-.2280	-.2490	-.2490

MACH (1) = .600 BETA (3) = .070

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3020	-.2920	-.2730	-.2100	-.2840	-.2630	-.2460	-.2510	-.2510

MACH (1) = .599 BETA (4) = 4.190

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2660	-.2590	-.2440	-.1940	-.2720	-.2650	-.2370	-.2500	-.2500

MAC (1) = .599 BETA (5) = 8.300

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2430	-.2540	-.2710	-.2150	-.2590	-.2660	-.2490	-.2470	-.2470

MAC (2) = .900 BETA (1) = -8.070

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3804	-.4010	-.3220	-.3030	-.3390	-.3320	-.2930	-.3050	-.3050

MAC (2) = .901 BETA (2) = -3.990

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3690	-.3860	-.3110	-.3000	-.3360	-.3310	-.2830	-.3120	-.3120

MAC (2) = .899 BETA (3) = .080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3350	-.3280	-.2960	-.3160	-.3380	-.3150	-.2620	-.3070	-.3070

MAC (2) = .898 BETA (4) = 4.230

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2670	-.2660	-.2810	-.3290	-.3240	-.2890	-.2710	-.2930	-.2930

MAC (2) = .904 BETA (5) = 8.360

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2640	-.2470	-.2810	-.3060	-.3180	-.2810	-.2880	-.2940	-.2940

AMES 11-7U7 OA12 O2A ORBITER BASE (RBFC27) (01 MAY 79)

REFERENCE DATA

SREF = 2.421U SQ.FT. XMRP = 28.53U0 INCHES
LREF = 39.54U0 INCHES YMRP = .UUU0 INCHES
BREF = 39.84U0 INCHES ZMRP = .UUU0 INCHES
SCALE = .03U0 SCALE

PARAMETRIC DATA

ALPHA = -4.UU0 RUDDER = .UU0
ELEVON = -2U.UU0 RUDFLR = .UU0

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .6U0 BETA (1) = -4.91U

	TAP NO	7.UU0	8.UU0	9.UU0	11.UU0	12.UU0	13.UU0	14.UU0	15.UU0	16.UU0
A										
	.UU0	-.224U	-.227U	-.156U	-.173U	-.19U0	-.17U0	-.123U	-.167U	-.167U

MACH (1) = .599 BETA (2) = .U8U

	TAP NO	7.UU0	8.UU0	9.UU0	11.UU0	12.UU0	13.UU0	14.UU0	15.UU0	16.UU0
A										
	.UU0	-.216U	-.214U	-.146U	-.165U	-.187U	-.17U0	-.11MU	-.15YU	-.15YU

MACH (1) = .599 BETA (3) = 5.26U

	TAP NO	7.UU0	8.UU0	9.UU0	11.UU0	12.UU0	13.UU0	14.UU0	15.UU0	16.UU0
A										
	.UU0	-.2U3U	-.232U	-.16XU	-.183U	-.186U	-.162U	-.13YU	-.16ZU	-.16ZU

MACH (2) = .897 BETA (1) = -4.98U

	TAP NO	7.UU0	8.UU0	9.UU0	11.UU0	12.UU0	13.UU0	14.UU0	15.UU0	16.UU0
A										
	.UU0	-.223U	-.215U	-.18XU	-.246U	-.244U	-.19MU	-.16ZU	-.19MU	-.19MU

MACH (2) = .896 BETA (2) = .U8U

	TAP NO	7.UU0	8.UU0	9.UU0	11.UU0	12.UU0	13.UU0	14.UU0	15.UU0	16.UU0
A										
	.UU0	-.212U	-.219U	-.164U	-.245U	-.234U	-.18YU	-.14ZU	-.19ZU	.19ZU

MACH (2) = .899 BETA (3) = 5.33U

	TAP NO	7.UU0	8.UU0	9.UU0	11.UU0	12.UU0	13.UU0	14.UU0	15.UU0	16.UU0
A										
	.UU0	-.246U	-.24XU	-.2X4U	-.266U	-.259U	-.23ZU	-.16ZU	-.21ZU	-.21ZU

AMES 11-7X7 OA12 02A ORBITER BASE (RBPC28) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.530[illegible] INCHES
LREF = 39.849[illegible] INCHES YMRP = .0000 INCHES
BREF = 39.849[illegible] INCHES ZMRP = .0000 INCHES
SCALE = .[illegible] SCALE

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000
ELEVON = -20.000 RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .597 BETA (1) = -7.970

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2630	-.2720	-.1760	-.2240	-.2240	-.2060	-.1380	-.1790	-.1790

MACH (1) = .596 BETA (2) = -3.940

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2270	-.2330	-.1590	-.1860	-.1960	-.1820	-.1250	-.1610	-.1610

MACH (1) = .598 BETA (3) = .090

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2090	-.2430	-.1580	-.1760	-.1980	-.1720	-.1330	-.1690	-.1690

MACH (1) = .595 BETA (4) = 4.190

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2140	-.2260	-.1560	-.1800	-.1900	-.1600	-.1220	-.1550	-.1550

MACH (1) = .598 BETA (5) = 8.290

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2110	-.2250	-.1440	-.2210	-.1760	-.1420	-.1140	-.1610	-.1610

MACH (2) = .900 BETA (1) = -8.080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2370	-.2490	-.1820	-.2540	-.2570	-.2060	-.1760	-.2150	-.2150

MACH (2) = .897 BETA (2) = -4.000

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2100	-.2180	-.1740	-.2380	-.2350	-.1810	-.1580	-.1990	-.1990

MACH (2) = .900 BETA (3) = .080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2230	-.2090	-.1760	-.2360	-.2290	-.1840	-.1530	-.1910	-.1910

MACH (2) = .904 BETA (4) = 4.240

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2210	-.2300	-.1920	-.2420	-.2260	-.1960	-.1530	-.1950	-.1950

MACH (2) = .904 BETA (5) = 8.400

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2330	-.2390	-.2000	-.2400	-.2350	-.2110	-.1660	-.2030	-.2030

AMES 11-7U7 OA12 O2A ORBITER BASE (RBPC29) (01 MAY 75)

REFERENCE DATA

SREF = 2.421U SQ.FT. XMRP = 28.53U0 INCHES
LREF = 39.849U INCHES YMRP = .UUU0 INCHES
BREF = 39.849U INCHES ZMRP = .UUU0 INCHES
SCALE = .U3UU SCALE

PARAMETRIC DATA

ALPHA = 5.UUU RUDDER = .UUU
ELEVON = -2U.UUU RUDFLR = .UUU

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .6UU BETA (1) = -8.03U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.261U	-.286U	-.186U	-.228U	-.229U	-.2U6U	-.154U	-.179U	-.17U

MACH (1) = .598 BETA (2) = -3.98U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.24U0	-.241U	-.154U	-.2U3U	-.2U6U	-.185U	-.12BU	-.1U4U	-.1U4U

MACH (1) = .598 BETA (3) = .08U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.23U0	-.215U	-.154U	-.186U	-.196U	-.168U	-.111U	-.15UU	-.15UU

MACH (1) = .6UU BETA (4) = 4.16U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.197U	-.217U	-.156U	-.2U6U	-.199U	-.149U	-.112U	-.15U0	-.15U0

MACH (1) = .597 BETA (5) = 8.25U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.159U	-.175U	-.139U	-.232U	-.188U	-.147U	-.141U	-.17SU	-.17SU

MACH (2) = .898 BETA (1) = -8.13U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.263U	-.278U	-.214U	-.263U	-.264U	-.227U	-.19U0	-.22U0	-.22U0

MACH (2) = .9U2 BETA (2) = -4.U2U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.224U	-.224U	-.166U	-.237U	-.237U	-.181U	-.141U	-.19U0	-.19U0

MACH (2) = .899 BETA (3) = .08U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.2U1U	-.213U	-.162U	-.241U	-.227U	-.177U	-.139U	-.19U0	-.19U0

MACH (2) = .897 BETA (4) = 4.21U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UU
A									
.UUU	-.215U	-.218U	-.162U	-.239U	-.227U	-.186U	-.147U	-.19UU	-.19UU

MACH (2) = .896 BETA (5) = 8.34U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.217U	-.2U7U	-.194U	-.249U	-.235U	-.2U1U	-.167U	-.2U4U	-.2U4U

DATE 14 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7X7 OA12 02A ORBITER BASE (RBPC30) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.[illegible] INCHES YMRP = .0000 INCHES
BREF = 39.[illegible] INCHES ZMRP = .0000 INCHES
SCALE = .[illegible] SCALE

PARAMETRIC DATA

ALPHA = [illegible] RUDDER = .00
ELEVON = -20.[illegible] RUDFLP = .00

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -8.050

TAP NO	7.000	8.000	9.000	11.000	12.00	13.000	14.000	15.000	16.000
A									
.000	-.2820	-.2840	-.2190	-.2150	-.2340	-.2180	-.1660	-.2660	-.2660

MACH (1) = .599 BETA (2) = -3.980

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2740	-.2830	-.1360	-.1980	-.2120	-.1710	-.1140	-.1610	-.1610

MACH (1) = .598 BETA (3) = .080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2230	-.2930	-.1580	-.1920	-.2120	-.1530	-.0980	-.1540	-.1540

MACH (1) = .598 BETA (4) = 4.150

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2230	-.2610	-.1510	-.1950	-.2120	-.1620	-.1180	-.1590	-.1590

MACH (1) = .598 BETA (5) = 8.230

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.1920	-.1980	-.1570	-.2130	-.2110	-.1490	-.1490	-.1750	-.1750

MACH (2) = .901 BETA (1) = -8.160

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2650	-.2670	-.2140	-.2310	-.2460	-.2320	-.1990	-.2310	-.2310

MACH (2) = .901 BETA (2) = -4.040

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2290	-.2310	-.1770	-.2240	-.2310	-.1950	-.1580	-.2020	-.2020

MACH (2) = .903 BETA (3) = .080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2130	-.2180	-.1800	-.2280	-.2350	-.1950	-.1520	-.1950	-.1950

MACH (2) = .902 BETA (4) = 4.190

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2290	-.2470	-.2010	-.2170	-.2300	-.1980	-.1490	-.2000	-.2000

MACH (2) = .903 BETA (5) = 8.320

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2190	-.2110	-.1990	-.2400	-.2380	-.2190	-.1810	-.2170	-.2170

AMES 11-7X7 OA12 O2A ORBITER BASE (RBPC31) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.530[illegible] INCHES
LREF = 39.[illegible] INCHES YMRP = .0000 INCHES
BREF = 39.[illegible] INCHES ZMRP = .0000 INCHES
SCALE = .03[illegible] SCALE

PARAMETRIC DATA

ALPHA = 15.000 RUDDER = .000
ELEVON = -20.000 RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -8.040

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2920	-.3120	-.2280	-.2050	-.2480	-.2310	-.1830	-.2110	-.2110

MACH (1) = .598 BETA (2) = -3.980

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2700	-.2770	-.1850	-.1730	-.2120	-.2140	-.1390	-.1890	-.1890

MACH (1) = .598 BETA (3) = .080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2590	-.2610	-.1880	-.1760	-.2180	-.1980	-.1350	-.1840	-.1840

MACH (1) = .599 BETA (4) = 4.170

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2400	-.2620	-.1630	-.1860	-.2130	-.1850	-.1290	-.1740	-.1740

MACH (1) = .597 BETA (5) = 8.240

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.1940	-.1570	-.1810	-.1990	-.2140	-.1840	-.1760	-.1930	-.1930

MACH (2) = .898 BETA (1) = -8.130

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2780	-.2710	-.2220	-.2260	-.2480	-.2320	-.2140	-.2330	-.2330

MACH (2) = .901 BETA (2) = -4.020

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2170	-.2340	-.1830	-.1920	-.2120	-.1940	-.1810	-.1980	-.1980

MACH (2) = .901 BETA (3) = .080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2200	-.2180	-.2010	-.2070	-.2330	-.2210	-.1870	-.2130	-.2130

MACH (2) = .897 BETA (4) = 4.200

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2310	-.2310	-.2040	-.2130	-.2320	-.2180	-.1870	-.2190	-.2190

MACH (2) = .898 BETA (5) = 8.330

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2310	-.2320	-.2310	-.2460	-.2520	-.2350	-.2070	-.2340	-.2340

AMES 11-FT OA12 02A ORBITER BASE (RBPC32) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.530[illegible] INCHES
LREF = 39.[illegible] INCHES YMRP = .[illegible] INCHES
BREF = 39.[illegible] INCHES ZMRP = .[illegible] INCHES
SCALE = .[illegible] SCALE

PARAMETRIC DAT[illegible]

ALPHA = 20.[illegible] RUDDER = .[illegible]
ELEVON = -20.[illegible] RUDFLR = .[illegible]

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .6[illegible] BETA (1) = -7.98[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A									
.[illegible]	-.332[illegible]	-.332[illegible]	-.253[illegible]	-.179[illegible]	-.285[illegible]	-.265[illegible]	-.243[illegible]	-.232[illegible]	-.232[illegible]

MACH (1) = .59[illegible] BETA (2) = -3.95[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A									
.[illegible]	-.292[illegible]	-.288[illegible]	-.226[illegible]	-.171[illegible]	-.264[illegible]	-.228[illegible]	-.211[illegible]	-.225[illegible]	-.225[illegible]

MACH (1) = .599 BETA (3) = .07[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A									
.[illegible]	-.294[illegible]	-.293[illegible]	-.237[illegible]	-.174[illegible]	-.263[illegible]	-.243[illegible]	-.201[illegible]	-.224[illegible]	-.224[illegible]

MACH (1) = .598 BETA (4) = 4.19[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A									
.[illegible]	-.273[illegible]	-.281[illegible]	-.229[illegible]	-.175[illegible]	-.256[illegible]	-.229[illegible]	-.195[illegible]	-.224[illegible]	-.224[illegible]

MACH (1) = .6[illegible] BETA (5) = 8.29[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A									
.[illegible]	-.217[illegible]	-.216[illegible]	-.229[illegible]	-.169[illegible]	-.252[illegible]	-.234[illegible]	-.226[illegible]	-.225[illegible]	-.225[illegible]

MACH (2) = .9[illegible] BETA (1) = -8.07[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A									
.[illegible]	-.377[illegible]	-.402[illegible]	-.313[illegible]	-.270[illegible]	-.319[illegible]	-.316[illegible]	-.282[illegible]	-.281[illegible]	-.281[illegible]

MACH (2) = .898 BETA (2) = -4.[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A									
.[illegible]	-.343[illegible]	-.379[illegible]	-.303[illegible]	-.262[illegible]	-.306[illegible]	-.298[illegible]	-.262[illegible]	-.278[illegible]	-.278[illegible]

MACH (2) = .905 BETA (3) = .07[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A									
.[illegible]	-.309[illegible]	-.303[illegible]	-.253[illegible]	-.262[illegible]	-.305[illegible]	-.276[illegible]	-.241[illegible]	-.275[illegible]	-.275[illegible]

MACH (2) = .897 BETA (4) = 4.22[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A									
.[illegible]	-.238[illegible]	-.229[illegible]	-.261[illegible]	-.301[illegible]	-.307[illegible]	-.265[illegible]	-.274[illegible]	-.286[illegible]	-.286[illegible]

MACH (2) = .901 BETA (5) = 8.36[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A									
.[illegible]	-.206[illegible]	-.216[illegible]	-.270[illegible]	-.282[illegible]	-.299[illegible]	-.249[illegible]	-.258[illegible]	-.270[illegible]	-.270[illegible]

AMES 11-7U7 OA12 O2A ORBITER BASE (RBFC33) (01 MAY 73)

REFERENCE DATA

SREF = 2.421U SQ.FT XMPP = 28.53U0 INCHES
LREF = 39.849: INCHES YMPP = .UUU0 INCHES
BREF = 39.849: INCHES ZMPP = .UUU0 INCHES
SCALE = .03U0 SCALE

PARAMETRIC DATA

ALPHA = -4.UUU RUDDER = .UUU
ELEVON = .UUU RUDFLR = 4U.UUU

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -4.91U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.3U4U	-.3U6U	-.27U0	-.296U	-.251U	-.246U	-.238U	-.256U	-.256U

MACH (1) = .599 BETA (2) = .U0U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.298U	-.3U3U	-.264U	-.238U	-.268U	-.265U	-.243U	-.245U	-.245U

MACH (1) = .598 BETA (3) = 5.28U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.3U6U	-.3U6U	-.259U	-.28UU	-.295U	-.28UU	-.253U	-.262U	-.262U

MACH (2) = .899 BETA (1) = -4.99U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.333U	-.381U	-.312U	-.331U	-.312U	-.296U	-.289U	-.298U	-.298U

MACH (2) = .899 BETA (2) = .U0U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.325U	-.329U	-.295U	-.265U	-.288U	-.285U	-.269U	-.271U	-.271U

MACH (2) = .9UU BETA (3) = 5.35U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.289U	-.296U	-.285U	-.322U	-.313U	-.3U1U	-.292U	-.3U2U	-.3U2U

AMES 11-7X7 OA12 OBA ORBITER BASE (RBPC34) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.530[illegible] INCHES
LREF = 39.849[illegible] INCHES YMRP = .0000 INCHES
BREF = 39.849[illegible] INCHES ZMRP = .0000 INCHES
SCALE = .03[illegible] SCALE

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000
ELEVON = .000 RUDFLR = 40.000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -7.990

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3100	-.3050	-.2660	-.3190	-.2600	-.2480	-.2490	-.2620	-.2620

MACH (1) = .599 BETA (2) = -3.950

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2850	-.2850	-.2520	-.2880	-.2450	-.2510	-.2310	-.2550	-.2550

MACH (1) = .599 BETA (3) = .090

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2870	-.2890	-.2560	-.2280	-.2670	-.2580	-.2290	-.2370	-.2370

MACH (1) = .599 BETA (4) = 4.200

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2720	-.2830	-.2450	-.2600	-.2790	-.2650	-.2320	-.2490	-.2490

MACH (1) = .599 BETA (5) = 8.310

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2910	-.3000	-.2590	-.2960	-.2980	-.2820	-.2500	-.2660	-.2660

MACH (2) = .899 BETA (1) = -8.100

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3050	-.3870	-.3150	-.3310	-.3090	-.2560	-.2800	-.2950	-.2950

MACH (2) = .897 BETA (2) = -4.010

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3130	-.3330	-.2910	-.3200	-.2900	-.2710	-.2710	-.2810	-.2810

MACH (2) = .898 BETA (3) = .080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2870	-.3080	-.2770	-.2580	-.2860	-.2800	-.2570	-.2640	-.2640

MACH (2) = .896 BETA (4) = 4.250

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3020	-.2870	-.2600	-.3160	-.3030	-.2860	-.2720	-.2790	-.2790

MACH (2) = .901 BETA (5) = 8.430

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3130	-.3260	-.3040	-.3280	-.3280	-.3160	-.3010	-.3080	-.3080

AMES 11-7X7 OA12 02A ORBITER BASE (RBPC35) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .1000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000
ELEVON = .000 RUDFLR = 40.000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .398 BETA (1) = -8.040

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
	.000	-.3100	.2990	-.2540	-.3000	-.2650	-.2590	-.2430	-.2590	-.2590

MACH (1) = .599 BETA (2) = -3.980

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
	.000	-.2850	-.2930	-.2440	-.2890	-.2560	-.2530	-.2170	-.2560	-.2560

MACH (1) = .599 BETA (3) = .080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
	.000	-.2640	-.2710	-.2340	-.2270	-.2650	-.2570	-.2170	-.2320	-.2320

MACH (1) = .599 BETA (4) = 4.170

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
	.000	-.2780	-.2760	-.2320	-.2540	-.2640	-.2610	-.2180	-.2460	-.2460

MACH (1) = .600 BETA (5) = 8.260

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
	.000	-.2740	-.2960	-.2540	-.2860	-.2860	-.2760	-.2230	-.2620	-.2620

MACH (2) = .903 BETA (1) = -8.160

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
	.000	-.3040	-.3830	-.3180	-.3130	-.2990	-.2600	-.2750	-.2820	-.2820

MACH (2) = .902 BETA (2) = -4.040

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
	.000	-.2850	-.3000	-.2710	-.3000	-.2760	-.2560	-.2400	-.2650	-.2650

MACH (2) = .904 BETA (3) = .080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
	.000	-.2860	-.2990	-.2650	-.2440	-.2690	-.2660	-.2300	-.2530	-.2530

MACH (2) = .902 BETA (4) = 4.220

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
	.000	-.2660	-.2890	-.2520	-.2790	-.2830	-.2730	-.2460	-.2620	-.2620

MACH (2) = .898 BETA (5) = 8.370

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
	.000	-.2880	-.2960	-.2850	-.3010	-.3020	-.2860	-.2730	-.2790	-.2790

AMES 11-FT 0412 02A ORBITER BASE (RBP036) [illegible] MAY 73

REFERENCE DATA

SREF = 2.4[illegible] SQ.FT. XMRC = 28.53[illegible] INCHES
LREF = [illegible] INCHES YMRC = .[illegible] INCHES
BREF = [illegible] INCHES ZMRC = .[illegible] INCHES
SCALE = [illegible] SCALE

PARAMETRIC DATA

ALPHA = 10.[illegible] RUDDER = .[illegible]
ELEVON = .[illegible] RUDFLR = 4[illegible]

SECTION (1.ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -8.07[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A	.[illegible]	-.311[illegible]	-.315[illegible]	-.261[illegible]	-.310[illegible]	-.275[illegible]	-.262[illegible]	-.239[illegible]	-.265[illegible]	-.265[illegible]

MACH (1) = .59[illegible] BETA (2) = -3.99[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A	.[illegible]	-.269[illegible]	-.291[illegible]	-.241[illegible]	-.294[illegible]	-.246[illegible]	-.252[illegible]	-.219[illegible]	-.24[illegible]	-.248[illegible]

MACH (1) = .599 BETA (3) = .08[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A	.[illegible]	-.264[illegible]	-.264[illegible]	-.229[illegible]	-.224[illegible]	-.265[illegible]	-.254[illegible]	-.219[illegible]	-.239[illegible]	-.239[illegible]

MACH (1) = .6[illegible] BETA (4) = 4.16[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A	.[illegible]	-.274[illegible]	-.265[illegible]	-.237[illegible]	-.265[illegible]	-.267[illegible]	-.252[illegible]	-.212[illegible]	-.246[illegible]	-.246[illegible]

MACH (1) = .599 BETA (5) = 8.23[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A	.[illegible]	-.253[illegible]	-.268[illegible]	-.242[illegible]	-.299[illegible]	-.291[illegible]	-.269[illegible]	-.241[illegible]	-.25[illegible]	-.268[illegible]

MACH (2) = .9[illegible] BETA (1) = -8.17[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A	.[illegible]	-.329[illegible]	-.361[illegible]	-.324[illegible]	-.319[illegible]	-.312[illegible]	-.299[illegible]	-.294[illegible]	-.314[illegible]	-.314[illegible]

MACH (2) = .9[illegible] BETA (2) = -4.05[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A	.[illegible]	-.312[illegible]	-.312[illegible]	-.284[illegible]	-.304[illegible]	-.291[illegible]	-.291[illegible]	-.259[illegible]	-.286[illegible]	-.286[illegible]

MACH (2) = .899 BETA (3) = .08[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A	.[illegible]	-.274[illegible]	-.298[illegible]	-.258[illegible]	-.265[illegible]	-.286[illegible]	-.281[illegible]	-.232[illegible]	-.269[illegible]	-.269[illegible]

MACH (2) = .897 BETA (4) = 4.2[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A	.[illegible]	-.253[illegible]	-.275[illegible]	-.254[illegible]	-.287[illegible]	-.289[illegible]	-.275[illegible]	-.251[illegible]	-.267[illegible]	-.267[illegible]

MACH (2) = .9[illegible] BETA (5) = 8.33[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A	.[illegible]	-.275[illegible]	-.277[illegible]	-.287[illegible]	-.303[illegible]	-.311[illegible]	-.295[illegible]	-.281[illegible]	-.294[illegible]	-.294[illegible]

AMES 11-7X7 OA12 02A ORBITER BASE (RBPC37) (01 MAY 73)

REFERENCE DATA

SREF = 2.421 SQ.FT. XMRP = 28.539 INCHES
LREF = 39.849 INCHES YMRP = .000 INCHES
BREF = 39.849 INCHES ZMRP = .000 INCHES
SCALE = .039 SCALE

PARAMETRIC DATA

ALPHA = 15.000 RUDDER = .000
ELEVON = .000 RUDFLR = 40.000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .596 BETA (1) = -8.050

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3390	-.3380	-.2970	-.3260	-.2980	-.2930	-.2560	-.2940	-.2940

MACH (1) = .598 BETA (2) = -3.990

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3010	-.2950	-.2660	-.2810	-.2830	-.2780	-.2490	-.2660	-.2660

MACH (1) = .598 BETA (3) = .080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3220	-.3220	-.2770	-.2470	-.3010	-.2950	-.2490	-.2760	-.2760

MACH (1) = .596 BETA (4) = 4.160

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2510	-.2730	-.2510	-.2820	-.2770	-.2590	-.2470	-.2670	-.2670

MACH (1) = .597 BETA (5) = 8.250

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2690	-.2680	-.2520	-.2960	-.2990	-.2740	-.2610	-.2740	-.2740

MACH (2) = .899 BETA (1) = -8.150

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3290	-.3470	-.3320	-.3430	-.3440	-.3220	-.3160	-.3250	-.3250

MACH (2) = .897 BETA (2) = -4.030

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3260	-.3540	-.3140	-.3160	-.3150	-.3060	-.2890	-.3010	-.3010

MACH (2) = .900 BETA (3) = .070

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3370	-.3380	-.2930	-.3050	-.3280	-.3110	-.2650	-.3040	-.3040

MACH (2) = .902 BETA (4) = 4.200

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2880	-.2900	-.2820	-.3080	-.3170	-.2960	-.3000	-.3060	-.3060

MACH (2) = .902 BETA (5) = 8.330

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2740	-.2650	-.2870	-.3420	-.3360	-.2930	-.3110	-.3180	-.3180

AMES 11-7U7 OA12 O2A ORBITER BASE (RBPC38) (01 MAY 73)

REFERENCE DATA

SREF = 2.421U SQ.FT. XMRP = 28.53U0 INCHES
LREF = 39.849U INCHES YMRP = .UUU0 INCHES
BREF = 39.849U INCHES ZMRP = .UUU0 INCHES
SCALE = .03U SCALE

PARAMETRIC DATA

ALPHA = 2U.UU0 RUDDER = .UU0
ELEVON = .UU0 RUDFLR = 4U.UU0

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -8.UU0

TAP NO	7.UU0	8.UU0	9.UU0	11.UU0	12.UU0	13.UU0	14.UU0	15.UU0	16.UU0
A									
.UU0	-.389U	-.39U0	-.339U	-.338U	-.317U	-.32U0	-.313U	-.319U	-.319U

MACH (1) = .598 BETA (2) = -3.96U

TAP NO	7.UU0	8.UU0	9.UU0	11.UU0	12.UU0	13.UU0	14.UU0	15.UU0	16.UU0
A									
.UU0	-.343U	-.359U	-.32U0	-.328U	-.317U	-.304U	-.288U	-.306U	-.306U

MACH (1) = .597 BETA (3) = .08U

TAP NO	7.UU0	8.UU0	9.UU0	11.UU0	12.UU0	13.UU0	14.UU0	15.UU0	16.UU0
A									
.UU0	-.372U	-.379U	-.32U0	-.273U	-.347U	-.339U	-.291U	-.303U	-.308U

MACH (1) = .597 BETA (4) = 4.19U

TAP NO	7.UU0	8.UU0	9.UU0	11.UU0	12.UU0	13.UU0	14.UU0	15.UU0	16.UU0
A									
.UU0	-.258U	-.261U	-.274U	-.311U	-.324U	-.291U	-.3U0U	-.3U4U	-.3U4U

MACH (1) = .598 BETA (5) = 8.3U0

TAP NO	7.UU0	8.UU0	9.UU0	11.UU0	12.UU0	13.UU0	14.UU0	15.UU0	16.UU0
A									
.UU0	-.312U	-.296U	-.299U	-.332U	-.332U	-.312U	-.307U	-.311U	-.311U

MACH (2) = .9U1 BETA (1) = -8.U8U

TAP NO	7.UU0	8.UU0	9.UU0	11.UU0	12.UU0	13.UU0	14.UU0	15.UU0	16.UU0
A									
.UU0	-.394U	-.444U	-.376U	-.352U	-.384U	-.371U	-.357U	-.352U	-.352U

MACH (2) = .899 BETA (2) = -3.99U

TAP NO	7.UU0	8.UU0	9.UU0	11.UU0	12.UU0	13.UU0	14.UU0	15.UU0	16.UU0
A									
.UU0	-.394U	-.451U	-.355U	-.351U	-.374U	-.372U	-.327U	-.344U	-.344U

MACH (2) = .9U1 BETA (3) = .08U

TAP NO	7.UU0	8.UU0	9.UU0	11.UU0	12.UU0	13.UU0	14.UU0	15.UU0	16.UU0
A									
.UU0	-.411U	-.411U	-.338U	-.327U	-.378U	-.363U	-.291U	-.338U	-.338U

MACH (2) = .9U0 BETA (4) = 4.22U

TAP NO	7.UU0	8.UU0	9.UU0	11.UU0	12.UU0	13.UU0	14.UU0	15.UU0	16.UU0
A									
.UU0	-.32U0	-.321U	-.321U	-.363U	-.366U	-.327U	-.311U	-.334U	-.334U

MACH (2) = .899 BETA (5) = 8.36U

TAP NO	7.UU0	8.UU0	9.UU0	11.UU0	12.UU0	13.UU0	14.UU0	15.UU0	16.UU0
A									
.UU0	-.285U	-.29U0	-.354U	-.39U0	-.386U	-.335U	-.353U	-.358U	-.358U

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RPPC39) (01 MAY 73)

AMES 11-7X7 OA12 02A ORBITER BASE

REFERENCE DATA

SREF = 2.421U SQ.FT. XMRP = 28.53UU INCHES
LREF = 39.849U INCHES YMRP = .UUUU INCHES
BREF = 39.849U INCHES ZMRP = .UUUU INCHES
SCALE = .03UU SCALE

PARAMETRIC DATA

BETA = .UUU RUDDER = .UUU
ELEVON = .UUU RUDFLR = .UUU

SECTION (1)ORBITER BASE

DEPENDENT VARIABLE CP

MACH (1) = 1.U99 ALPHA (1) = -4.55U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.4U5U	-.397U	-.369U	-.357U	-.38UU	-.374U	-.349U	-.365U	-.365U

MACH (1) = 1.1UU ALPHA (2) = -3.52U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.38UU	-.374U	-.363U	-.357U	-.373U	-.371U	-.346U	-.361U	-.361U

MACH (1) = 1.1UU ALPHA (3) = -1.49U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.378U	-.371U	-.359U	-.351U	-.372U	-.367U	-.349U	-.358U	-.358U

MACH (1) = 1.U98 ALPHA (4) = .54U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.369U	-.367U	-.363U	-.352U	-.371U	-.371U	-.349U	-.356U	-.356U

MACH (1) = 1.15U ALPHA (5) = 2.51U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.374U	-.371U	-.363U	-.353U	-.373U	-.369U	-.355U	-.362U	-.362U

MACH (1) = 1.U99 ALPHA (6) = 4.05U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.362U	-.361U	-.364U	-.357U	-.372U	-.371U	-.357U	-.358U	-.358U

MACH (1) = 1.1UU ALPHA (7) = 6.63U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.371U	-.363U	-.368U	-.363U	-.381U	-.378U	-.362U	-.367U	-.367U

MACH (1) = 1.1UU ALPHA (8) = 8.59U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.398U	-.382U	-.382U	-.373U	-.392U	-.385U	-.368U	-.379U	-.379U

MACH (1) = 1.U99 ALPHA (9) = 9.97U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.394U	-.392U	-.381U	-.381U	-.396U	-.389U	-.374U	-.384U	-.384U

MACH (1) = 1.1U1 ALPHA (10) = 14.97U

TAP NO	7.UUU	8.UUU	9.UUU	11.UUU	12.UUU	13.UUU	14.UUU	15.UUU	16.UUU
A									
.UUU	-.422U	-.421U	-.422U	-.418U	-.435U	-.431U	-.411U	-.415U	-.415U

AMES 11-7U7 OA12 O2A ORBITER BASE (RBPC39)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (2) = 1.247 ALPHA (1) = -4.440

	TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A										
	.000	-.3440	-.3460	-.3310	-.3150	-.3400	-.3320	-.3230	-.3270	-.3270

MACH (2) = 1.248 ALPHA (2) = -3.470

	TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A										
	.000	-.3410	-.3420	-.3270	-.3160	-.3350	-.3330	-.3160	-.3240	-.3240

MACH (2) = 1.247 ALPHA (3) = -1.470

	TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A										
	.000	-.3240	-.3250	-.3170	-.3200	-.3330	-.3310	-.3120	-.3220	-.3220

MACH (2) = 1.248 ALPHA (4) = .520

	TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A										
	.000	-.3200	-.3210	-.3270	-.3200	-.3330	-.3320	-.3200	-.3270	-.3270

MACH (2) = 1.250 ALPHA (5) = 2.580

	TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A										
	.000	-.3310	-.3310	-.3340	-.3290	-.3410	-.3360	-.3270	-.3300	-.3300

MACH (2) = 1.248 ALPHA (6) = 4.570

	TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A										
	.000	-.3140	-.3330	-.3340	-.3280	-.3410	-.3350	-.3300	-.3320	-.3320

MACH (2) = 1.248 ALPHA (7) = 6.670

	TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A										
	.000	-.3360	-.3360	-.3370	-.3310	-.3480	-.3420	-.3340	-.3350	-.3350

MACH (2) = 1.249 ALPHA (8) = 8.660

	TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A										
	.000	-.3230	-.3480	-.3480	-.3390	-.3580	-.3540	-.3480	-.3460	-.3460

MACH (2) = 1.246 ALPHA (9) = 10.030

	TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A										
	.000	-.3330	-.3480	-.3580	-.3400	-.3650	-.3590	-.3460	-.3510	-.3510

MACH (2) = 1.244 ALPHA (10) = 14.980

	TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A										
	.000	-.3790	-.3870	-.3880	-.3610	-.3950	-.3870	-.3850	-.3850	-.3850

MACH (3) = 1.398 ALPHA (1) = -4.420

	TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A										
	.000	-.3470	-.3860	-.3130	-.3030	-.3190	-.3140	-.3180	-.3110	-.3110

MACH (3) = 1.395 ALPHA (2) = -3.420

	TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A										
	.000	-.3160	-.3350	-.3120	-.3040	-.3210	-.3150	-.3200	-.3130	-.3130

AMES 11-7?7 OA12 O2A ORBITER BASE (RBPC39)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (3) = 1.398 ALPHA (3) = -1.430

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A .000	-.3000	-.3220	-.3190	-.3010	-.3160	-.3090	-.3110	-.3080	-.3080

MACH (3) = 1.397 ALPHA (4) = .520

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A .000	-.2880	-.3080	-.3110	-.2990	-.3120	-.3110	-.3010	-.3000	-.3000

MACH (3) = 1.396 ALPHA (5) = 2.600

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A .000	-.2870	-.3060	-.3090	-.3010	-.3150	-.3110	-.3000	-.3040	-.3040

MACH (3) = 1.397 ALPHA (6) = 4.570

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A .000	-.2890	-.3010	-.3130	-.3040	-.3170	-.3110	-.3050	-.3080	-.3080

MACH (3) = 1.399 ALPHA (7) = 6.440

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A .000	-.2850	-.3020	-.3150	-.3060	-.3190	-.3130	-.3060	-.3090	-.3090

MACH (3) = 1.398 ALPHA (8) = 8.710

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A .000	-.2910	-.3080	-.3270	-.3090	-.3280	-.3220	-.3180	-.3170	-.3170

MACH (3) = 1.397 ALPHA (9) = 10.110

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A .000	-.3010	-.3140	-.3290	-.3120	-.3340	-.3270	-.3220	-.3210	-.3210

MACH (3) = 1.394 ALPHA (10) = 15.030

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A .000	-.3220	-.3460	-.3470	-.3110	-.3590	-.3470	-.3380	-.3390	-.3390

AMES 11-7X7 OA12 O2A ORBITER BASE (RBPC40) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = .500 RUDDER = .000
ELEVON = .000 RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = 1.099 BETA (1) = -8.080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.4220	-.4760	-.3860	-.3730	-.3750	-.3700	-.3650	-.3650	-.3650

MACH (1) = 1.101 BETA (2) = -4.000

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3810	-.4040	-.3600	-.3630	-.3680	-.3720	-.3590	-.3580	-.3580

MACH (1) = 1.100 BETA (3) = -1.960

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3700	-.3850	-.3620	-.3540	-.3690	-.3650	-.3550	-.3600	-.3600

MACH (1) = 1.099 BETA (4) = .080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3690	-.3680	-.3630	-.3450	-.3710	-.3690	-.3500	-.3590	-.3590

MACH (1) = 1.099 BETA (5) = 2.150

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3600	-.3580	-.3600	-.3510	-.3740	-.3630	-.3530	-.3590	-.3590

MACH (1) = 1.100 BETA (6) = 4.230

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3320	-.3290	-.3640	-.3530	-.3630	-.3640	-.3580	-.3530	-.3530

MACH (1) = 1.099 BETA (7) = 8.390

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3360	-.3310	-.3610	-.3710	-.3720	-.3710	-.3620	-.3630	-.3630

MACH (2) = 1.250 BETA (1) = -8.040

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3930	-.4390	-.3690	-.3390	-.3670	-.3680	-.3500	-.3490	-.3490

MACH (2) = 1.247 BETA (2) = -3.970

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3710	-.3970	-.3410	-.3280	-.3450	-.3420	-.3390	-.3380	-.3380

MACH (2) = 1.247 BETA (3) = -1.940

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.3540	-.3530	-.3330	-.3200	-.3390	-.3340	-.3300	-.3310	-.3310

AMES 11-7U7 OA12 O2A ORBITER BASE (RBPC40)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (2) = 1.246 BETA (4) = .08°

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.329D	-.329D	-.325D	-.320D	-.337D	-.334D	-.321D	-.332D	-.332D

MACH (2) = 1.245 BETA (5) = 2.14D

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.306D	-.308D	-.334D	-.323D	-.337D	-.332D	-.329D	-.326D	-.326D

MACH (2) = 1.245 BETA (6) = 4.21D

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.312D	-.312D	-.329D	-.326D	-.342D	-.339D	-.340D	-.334D	-.334D

MACH (2) = 1.247 BETA (7) = 8.34D

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.318D	-.327D	-.357D	-.338D	-.356D	-.351D	-.355D	-.345D	-.345D

MACH (3) = 1.396 BETA (1) = -8.04D

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.358D	-.372D	-.355D	-.322D	-.346D	-.343D	-.339D	-.331D	-.331D

MACH (3) = 1.399 BETA (2) = -3.97D

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.330D	-.342D	-.321D	-.306D	-.326D	-.322D	-.319D	-.313D	-.313D

MACH (3) = 1.397 BETA (3) = .08D

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.298D	-.299D	-.311D	-.298D	-.313D	-.307D	-.299D	-.299D	-.299D

MACH (3) = 1.394 BETA (4) = 4.21D

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.288D	-.304D	-.324D	-.311D	-.321D	-.316D	-.324D	-.317D	-.317D

MACH (3) = 1.392 BETA (5) = 8.36D

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.315D	-.316D	-.349D	-.336D	-.336D	-.341D	-.345D	-.337D	-.337D

AMES 11-7U7 OA12 02A ORBITER BASE (RBPC41) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.53[illegible] INCHES
LREF = 39.849[illegible] INCHES YMRP = .[illegible] INCHES
BREF = 39.849[illegible] INCHES ZMRP = .[illegible] INCHES
SCALE = .[illegible] SCALE

PARAMETRIC DATA

ALPHA = -4.[illegible] RUDDER = -[illegible]
ELEVON = .[illegible] RUDFLP = .[illegible]

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .6[illegible] BETA (1) = -4.91[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A									
.[illegible]	-.232[illegible]	-.214[illegible]	-.194[illegible]	-.259[illegible]	-.226[illegible]	-.214[illegible]	-.196[illegible]	-.217[illegible]	-.217[illegible]

MACH (1) = .59[illegible] BETA (2) = .09[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A									
.[illegible]	-.219[illegible]	-.212[illegible]	-.193[illegible]	-.196[illegible]	-.217[illegible]	-.206[illegible]	-.191[illegible]	-.195[illegible]	-.195[illegible]

MACH (1) = .6[illegible] BETA (3) = 5.28[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A									
.[illegible]	-.242[illegible]	-.238[illegible]	-.206[illegible]	-.236[illegible]	-.249[illegible]	-.231[illegible]	-.183[illegible]	-.216[illegible]	-.218[illegible]

MACH (2) = .96[illegible] BETA (1) = -4.99[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A									
.[illegible]	-.214[illegible]	-.235[illegible]	-.224[illegible]	-.256[illegible]	-.257[illegible]	-.237[illegible]	-.215[illegible]	-.235[illegible]	-.236[illegible]

MACH (2) = .96[illegible] BETA (2) = .09[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A									
.[illegible]	-.208[illegible]	-.244[illegible]	-.228[illegible]	-.221[illegible]	-.241[illegible]	-.236[illegible]	-.211[illegible]	-.231[illegible]	-.231[illegible]

MACH (2) = .96[illegible] BETA (3) = 5.36[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A									
.[illegible]	-.244[illegible]	-.241[illegible]	-.228[illegible]	-.256[illegible]	-.255[illegible]	-.246[illegible]	-.226[illegible]	-.254[illegible]	-.251[illegible]

AMES 11-7U7 OA12 O2A ORBITER BASE (RBPC42) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = -4.000 RUDDER = -20.000
ELEVON = .000 RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .596 BETA (1) = -4.900

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2210	-.2200	-.2060	-.2640	-.2220	-.2130	-.2070	-.2200	-.2200

MACH (1) = .596 BETA (2) = .100

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2170	-.2180	-.2160	-.2130	-.2320	-.2240	-.2070	-.2130	-.2130

MACH (1) = .598 BETA (3) = 5.290

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2460	-.2460	-.2250	-.2450	-.2610	-.2500	-.2140	-.2380	-.2380

MACH (2) = .904 BETA (1) = -4.980

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2320	-.2440	-.2410	-.2760	-.2710	-.2480	-.2320	-.2460	-.2460

MACH (2) = .900 BETA (2) = .100

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2480	-.2440	-.2330	-.2320	-.2510	-.2550	-.2410	-.2460	-.2460

MACH (2) = .901 BETA (3) = 5.360

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2440	-.2430	-.2500	-.2800	-.2790	-.2730	-.2550	-.2670	-.2670

AMES 11-7X7 OA12 02A ORBITER BASE (RBPC43) (01 MAY 73)

REFERENCE DATA

SREF = 2.4211 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = -4.000 RUDDER = .000
ELEVON = 10.000 RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -4.910

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2430	-.2440	-.2140	-.2710	-.2460	-.2100	-.1960	-.2260	-.2260

MACH (1) = .599 BETA (2) = .080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2480	-.2490	-.2220	-.2130	-.2340	-.2220	-.1870	-.2210	-.2210

MACH (1) = .597 BETA (3) = 5.270

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2710	-.2720	-.2240	-.2380	-.2550	-.2420	-.1970	-.2280	-.2280

MACH (2) = .897 BETA (1) = -4.980

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2530	-.2630	-.2630	-.2990	-.2950	-.2650	-.2530	-.2650	-.2650

MACH (2) = .896 BETA (2) = .080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2470	-.2320	-.2290	-.2330	-.2390	-.2370	-.2190	-.2330	-.2330

MACH (2) = .903 BETA (3) = 5.340

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.2620	-.2630	-.2480	-.2630	-.2530	-.2590	-.2350	-.2530	-.2530

AMES 11-FT CA12 02A ORBITER BASE (BBC44, 11 MAY 93)

REFERENCE DATA

SREF = 2.421 SQ.FT. XMRC = 28.533 INCHES
LREF = 33.049 INCHES YMRC = .000 INCHES
BREF = 19.049 INCHES ZMRC = .000 INCHES
SCALE = .01 SCALE

PARAMETRIC DATA

ALPHA = -4.00 PHICOS = .99
ELEVON = -11.00 PHISIN = .14

SECTION 1 ORBITER BASE DEPENDENT VARIABLE CP

MACH 1) = .597 BETA 1) = -4.91

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.211	-.211	-.154	-.169	-.191	-.172	-.146	-.173	-.173

MACH 1) = .597 BETA 2) = .00

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.212	-.219	-.161	-.159	-.194	-.178	-.141	-.169	-.169

MACH 1) = .597 BETA 3) = 5.27

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.196	-.229	-.159	-.162	-.199	-.175	-.132	-.164	-.164

MACH 2) = .903 BETA 1) = -4.98

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.233	-.229	-.214	-.223	-.218	-.212	-.186	-.216	-.216

MACH 2) = .902 BETA 2) = .00

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.225	-.224	-.196	-.211	-.211	-.209	-.175	-.213	-.213

MACH 2) = .904 BETA 3) = 5.34

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.226	-.233	-.209	-.211	-.224	-.217	-.175	-.211	-.211

TABULATED PRESSURE DATA - OA12A

AMES 11-FT WIND TUNNEL OPA ORBITER BASE (RBPC45) 11 MAY 73

REFERENCE DATA

SREF = 2.421 SQ.FT. XMRP = 28.531 INCHES
LREF = 39.069 INCHES YMRP = .000 INCHES
BREF = 39.069 INCHES ZMRP = .000 INCHES
SCALE = .1 SCALE

PARAMETRIC DATA

ALPHA = -4.000 RUDDER = .000
ELEVON = .000 RUDFLP = .000

SECTION 1 ORBITER BASE

DEPENDENT VARIABLE CP

MACH = .6 BETA = -4.91

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A .000	-.253	-.244	-.196	-.250	-.212	-.199	-.182	-.208	-.208

MACH = .897 BETA = .09

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A .000	-.256	-.252	-.197	-.193	-.216	-.194	-.171	-.199	-.199

MACH = .598 BETA = 5.28

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A .000	-.307	-.247	-.209	-.212	-.229	-.216	-.171	-.212	-.212

MACH = .9.1 BETA = -5.000

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A .000	-.229	-.232	-.227	-.247	-.248	-.228	-.208	-.228	-.228

MACH = .902 BETA = .09

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A .000	-.222	-.234	-.226	-.217	-.244	-.234	-.211	-.226	-.226

MACH = .900 BETA = 5.39

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A .000	-.226	-.234	-.219	-.255	-.243	-.233	-.215	-.241	-.241

AMES 11-7X7 OA12 02A ORBITER BASE (RBPC46) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.530 INCHES
LREF = 39.849 INCHES YMRP = .000 INCHES
BREF = 39.849 INCHES ZMRP = .000 INCHES
SCALE = .[illegible] SCALE

PARAMETRIC DATA

BETA = .000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .600 ALPHA (1) =-15.850

	TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A										
	.000	-.294	-.264	-.211	-.179	-.233	-.224	-.185	-.201	-.201

MACH (1) = .599 ALPHA (2) =-10.490

	TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A										
	.000	-.251	-.272	-.211	-.178	-.226	-.207	-.178	-.202	-.202

MACH (1) = .599 ALPHA (3) = -5.200

	TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A										
	.000	-.273	-.255	-.192	-.188	-.224	-.211	-.175	-.199	-.199

MACH (1) = .599 ALPHA (4) = .050

	TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A										
	.000	-.232	-.241	-.191	-.197	-.213	-.209	-.164	-.190	-.191

MACH (2) = .900 ALPHA (1) =-16.390

	TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A										
	.000	-.289	-.298	-.263	-.262	-.287	-.281	-.245	-.271	-.271

MACH (2) = .901 ALPHA (2) =-10.840

	TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A										
	.000	-.268	-.276	-.256	-.245	-.272	-.268	-.251	-.262	-.262

MACH (2) = .900 ALPHA (3) = -5.380

	TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A										
	.000	-.227	-.246	-.227	-.219	-.242	-.236	-.216	-.229	-.229

MACH (2) = .902 ALPHA (4) = .060

	TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A										
	.000	-.213	-.235	-.212	-.224	-.233	-.228	-.208	-.222	-.222

AMES 11-7X7 OA12 OBA ORBITER BASE (RBFC47) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.53[illegible] INCHES
LREF = 39.849[illegible] INCHES YMRP = .[illegible] INCHES
BREF = 39.849[illegible] INCHES ZMRP = .[illegible] INCHES
SCALE = .03[illegible] SCALE

PARAMETRIC DATA

ALPHA = -5.000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

SECTION (1) ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) =-10.300

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.277[illegible]	-.222[illegible]	-.197[illegible]	-.233[illegible]	-.233[illegible]	-.207[illegible]	-.208[illegible]	-.216[illegible]	-.216[illegible]

MACH (1) = .597 BETA (2) = -5.190

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.238[illegible]	-.24[illegible]	-.194[illegible]	-.213[illegible]	-.222[illegible]	-.21[illegible]	-.176[illegible]	-.21[illegible]	-.21[illegible]

MACH (1) = .597 BETA (3) = 5.000

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.262[illegible]	-.241[illegible]	-.213[illegible]	-.21[illegible]	-.238[illegible]	-.223[illegible]	-.182[illegible]	-.21[illegible]	-.21[illegible]

MACH (1) = .599 BETA (4) = 10.080

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.326[illegible]	-.288[illegible]	-.251[illegible]	-.263[illegible]	-.258[illegible]	-.241[illegible]	-.21[illegible]	-.217[illegible]	-.217[illegible]

MACH (2) = .898 BETA (1) =-10.440

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.243[illegible]	-.255[illegible]	-.25[illegible]	-.31[illegible]	-.279[illegible]	-.253[illegible]	-.25[illegible]	-.265[illegible]	-.265[illegible]

MACH (2) = .904 BETA (2) = -5.270

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.229[illegible]	-.253[illegible]	-.241[illegible]	-.264[illegible]	-.259[illegible]	-.249[illegible]	-.229[illegible]	-.244[illegible]	-.244[illegible]

MACH (2) = .902 BETA (3) = 5.070

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.234[illegible]	-.251[illegible]	-.232[illegible]	-.265[illegible]	-.253[illegible]	-.241[illegible]	-.219[illegible]	-.244[illegible]	-.244[illegible]

MACH (2) = .898 BETA (4) = 10.220

TAP NO	7.000	8.000	9.000	11.000	12.000	13.000	14.000	15.000	16.000
A									
.000	-.281[illegible]	-.311[illegible]	-.281[illegible]	-.321[illegible]	-.30[illegible]	-.29[illegible]	-.255[illegible]	-.272[illegible]	-.272[illegible]

AMES 11-7X7 OA12 02A ORBITER BASE (RBPC48) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.53[illegible] INCHES
LREF = 39.849[illegible] INCHES YMRP = .[illegible] INCHES
BREF = 39.849[illegible] INCHES ZMRP = .[illegible] INCHES
SCALE = .03[illegible] SCALE

PARAMETRIC DATA

ALPHA = -10.[illegible] RUDDER = .[illegible]
ELEVON = .[illegible] RUDFLR = .[illegible]

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) =-10.23[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A .[illegible]	-.285[illegible]	-.291[illegible]	-.223[illegible]	-.261[illegible]	-.237[illegible]	-.198[illegible]	-.211[illegible]	-.215[illegible]	-.215[illegible]

MACH (1) = .598 BETA (2) = -5.18[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A .[illegible]	-.284[illegible]	-.284[illegible]	-.208[illegible]	-.214[illegible]	-.229[illegible]	-.216[illegible]	-.183[illegible]	-.211[illegible]	-.211[illegible]

MACH (1) = .597 BETA (3) = 5.02[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A .[illegible]	-.329[illegible]	-.288[illegible]	-.233[illegible]	-.191[illegible]	-.236[illegible]	-.222[illegible]	-.193[illegible]	-.210[illegible]	-.210[illegible]

MACH (1) = .599 BETA (4) = 10.12[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A .[illegible]	-.359[illegible]	-.291[illegible]	-.248[illegible]	-.272[illegible]	-.269[illegible]	-.254[illegible]	-.198[illegible]	-.221[illegible]	-.221[illegible]

MACH (2) = .901 BETA (1) =-10.48[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A .[illegible]	-.285[illegible]	-.301[illegible]	-.269[illegible]	-.331[illegible]	-.300[illegible]	-.271[illegible]	-.246[illegible]	-.274[illegible]	-.274[illegible]

MACH (2) = .898 BETA (2) = -5.27[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A .[illegible]	-.254[illegible]	-.271[illegible]	-.251[illegible]	-.281[illegible]	-.268[illegible]	-.269[illegible]	-.249[illegible]	-.255[illegible]	-.255[illegible]

MACH (2) = .901 BETA (3) = 5.11[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A .[illegible]	-.289[illegible]	-.295[illegible]	-.263[illegible]	-.284[illegible]	-.291[illegible]	-.278[illegible]	-.257[illegible]	-.264[illegible]	-.264[illegible]

MACH (2) = .900 BETA (4) = 10.30[illegible]

TAP NO	7.[illegible]	8.[illegible]	9.[illegible]	11.[illegible]	12.[illegible]	13.[illegible]	14.[illegible]	15.[illegible]	16.[illegible]
A .[illegible]	-.296[illegible]	-.335[illegible]	-.283[illegible]	-.338[illegible]	-.319[illegible]	-.297[illegible]	-.251[illegible]	-.284[illegible]	-.284[illegible]

AMES 11-FT WT OA12 OBA UPPER MPS NOZZLE (REPROD: 1 MAY 75)

REFERENCE DATA

SREF = 2.421 SQ.FT. XMRP = 28.550 INCHES
LREF = 39.849 INCHES YMRP = .000 INCHES
BREF = 39.849 INCHES ZMRP = .000 INCHES
SCALE = .025 SCALE

PARAMETRIC DATA

BETA = .00 RUDDER = .00
ELEVON = .00 RUDELR = .00

SECTION (1,MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .599 ALPHA (2) = -4.41D

X/LNF	.25D	.50D	.75D
PHI			
.000	-.164D	-.155D	
90.000	-.161D	-.161D	-.159D
135.000	-.166D	-.163D	-.158D
180.000	-.159D	-.161D	-.161D
225.000	-.161D	-.159D	-.156D
270.000	-.159D	-.159D	-.157D

MACH (1) = .599 ALPHA (2) = .03D

X/LNF	.25D	.50D	.75D
PHI			
.000	-.158D	-.154D	
90.000	-.153D	-.155D	-.155D
135.000	-.155D	-.159D	-.152D
180.000	-.157D	-.153D	-.153D
225.000	-.152D	-.153D	-.152D
270.000	-.152D	-.158D	-.152D

MACH (1) = .600 ALPHA (3) = 5.03D

X/LNF	.25D	.50D	.75D
PHI			
.000	-.164D	-.161D	
90.000	-.161D	-.156D	-.162D
135.000	-.166D	-.165D	-.163D
180.000	-.161D	-.165D	-.158D
225.000	-.163D	-.164D	-.159D
270.000	-.164D	-.161D	-.164D

MACH (1) = .600 ALPHA (4) = 10.04D

X/LNF	.25D	.50D	.75D
PHI			
.000	-.169D	-.172D	
90.000	-.165D	-.171D	-.171D
135.000	-.173D	-.171D	-.172D
180.000	-.171D	-.172D	-.172D
225.000	-.172D	-.174D	-.172D
270.000	-.174D	-.171D	-.170D

MACH (1) = .598 ALPHA (5) = 15.02D

X/LNF	.25D	.50D	.75D
PHI			
.000	-.221D	-.218D	
90.000	-.219D	-.213D	-.216D
135.000	-.218D	-.221D	-.216D
180.000	-.218D	-.219D	-.211D
225.000	-.221D	-.221D	-.216D

AMES 11-7X7 OA12 02A UPPER MPS NOZZLE (RBPDU1)

SECTION (2)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .598 ALPHA (5) = 15.[illegible]2[illegible]

Y/LNP	.25[illegible]	.5[illegible]	.75[illegible]
PHI			
27[illegible].[illegible]	- 216[illegible]	-.218[illegible]	-.214[illegible]

MACH (1) = .599 ALPHA (6) = 20.[illegible]

Y/LNP	.25[illegible]	.5[illegible]	.75[illegible]
PHI			
.[illegible]	-.263[illegible]	-.266[illegible]	
9[illegible].[illegible]	-.262[illegible]	-.267[illegible]	-.265[illegible]
135.[illegible]	-.263[illegible]	-.263[illegible]	-.258[illegible]
18[illegible].[illegible]	-.266[illegible]	- 263[illegible]	-.259[illegible]
225.[illegible]	-.269[illegible]	-.262[illegible]	-.262[illegible]
27[illegible].[illegible]	-.263[illegible]	-.266[illegible]	-.262[illegible]

MACH (1) = .597 ALPHA (7) = 22.58[illegible]

X/LNP	.25[illegible]	.5[illegible]	.75[illegible]
PHI			
.[illegible]	-.298[illegible]	-.3[illegible]	
9[illegible].[illegible]	-.296[illegible]	-.3[illegible]	-.297[illegible]
135.[illegible]	-.3[illegible]	-.3[illegible]	-.298[illegible]
18[illegible].[illegible]	-.3[illegible]	-.3[illegible]	-.298[illegible]
225.[illegible]	-.296[illegible]	-.293[illegible]	-.294[illegible]
27[illegible].[illegible]	-.295[illegible]	-.299[illegible]	-.297[illegible]

MACH (2) = .905 ALPHA (1) = -4.56[illegible]

X/LNP	.25[illegible]	.5[illegible]	.75[illegible]
PHI			
.[illegible]	-.19[illegible]	-.184[illegible]	
9[illegible].[illegible]	-.186[illegible]	-.185[illegible]	-.189[illegible]
135.[illegible]	-.187[illegible]	-.186[illegible]	-.192[illegible]
18[illegible].[illegible]	-.186[illegible]	-.184[illegible]	-.191[illegible]
225.[illegible]	-.186[illegible]	-.189[illegible]	-.188[illegible]
27[illegible].[illegible]	-.188[illegible]	-.193[illegible]	-.191[illegible]

MACH (2) = .901 ALPHA (2) = -.01[illegible]

X/LNP	.25[illegible]	.5[illegible]	.75[illegible]
PHI			
.[illegible]	-.182[illegible]	-.184[illegible]	
9[illegible].[illegible]	-.182[illegible]	-.177[illegible]	-.177[illegible]
135.[illegible]	-.184[illegible]	-.186[illegible]	-.177[illegible]
18[illegible].[illegible]	-.18[illegible]	-.178[illegible]	-.183[illegible]
225.[illegible]	-.182[illegible]	-.174[illegible]	-.178[illegible]
27[illegible].[illegible]	-.182[illegible]	-.184[illegible]	-.182[illegible]

MACH (2) = .904 ALPHA (3) = 4.98[illegible]

X/LNP	.25[illegible]	.5[illegible]	.75[illegible]
PHI			
.[illegible]	-.173[illegible]	-.176[illegible]	
9[illegible].[illegible]	-.178[illegible]	-.178[illegible]	-.177[illegible]
135.[illegible]	-.177[illegible]	-.177[illegible]	-.176[illegible]
18[illegible].[illegible]	-.17[illegible]	-.178[illegible]	-.177[illegible]
225.[illegible]	-.175[illegible]	-.18[illegible]	-.176[illegible]

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AMES 11-FT OA12 02A UPPER MPS NOZZLE

SECTION 1 UPPER MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .914 ALPHA (3) = 4.980

X/LNP	.250	.500	.750
PHI			
270.000	-.168U	-.180U	-.175U

MACH (2) = .916 ALPHA (4) = 9.990

X/LNP	.250	.500	.750
PHI			
.000	-.199U	-.198U	
90.000	-.196U	-.196U	-.197U
135.000	-.197U	-.201U	-.197U
180.000	-.192U	-.195U	-.198U
225.000	-.196U	-.192U	-.198U
270.000	-.195U	-.194U	-.196U

MACH (2) = .901 ALPHA (5) = 14.990

X/LNP	.250	.500	.750
PHI			
.000	-.256U	-.251U	
90.000	-.253U	-.251U	-.249U
135.000	-.253U	-.252U	-.248U
180.000	-.253U	-.251U	-.250U
225.000	-.254U	-.250U	-.250U
270.000	-.254U	-.251U	-.250U

MACH (2) = .906 ALPHA (6) = 20.020

X/LNP	.250	.500	.750
PHI			
.000	-.301U	-.302U	
90.000	-.291U	-.307U	-.301U
135.000	-.299U	-.301U	-.304U
180.000	-.296U	-.305U	-.302U
225.000	-.292U	-.302U	-.299U
270.000	-.301U	-.298U	-.303U

MACH (2) = .902 ALPHA (7) = 25.040

X/LNP	.250	.500	.750
PHI			
.000	-.440U	-.438U	
90.000	-.443U	-.441U	-.452U
135.000	-.445U	-.448U	-.443U
180.000	-.443U	-.444U	-.438U
225.000	-.431U	-.434U	-.433U
270.000	-.435U	-.444U	-.427U

AMES 11-7U7 OA12 O2A UPPER MPS NOZZLE (RBPD02) (01 MAY 73)

REFERENCE DATA

SREF = 2.421U SQ.FT. XMRP = 28.53UU INCHES
LREF = 39.849U INCHES YMRP = .UUUU INCHES
BREF = 39.849U INCHES ZMRP = .UUUU INCHES
SCALE = .U3UU SCALE

PARAMETRIC DATA

ALPHA = .UUU RUDDER = .UUU
ELEVON = .UUU RUDFLR = .UUU

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) =-10.01U

X/LNP	.250	.500	.750
PHI			
.UUU	-.193U	-.188U	
9U.UUU	-.187U	-.185U	-.183U
135.UUU	-.192U	-.19UU	-.186U
18U.UUU	-.187U	-.183U	-.189U
225.UUU	-.187U	-.182U	-.186U
27U.UUU	-.185U	-.19UU	-.183U

MACH (1) = .598 BETA (2) = -4.96U

X/LNP	.250	.500	.750
PHI			
.UUU	-.17UU	-.165U	
9U.UUU	-.166U	-.164U	-.169U
135.UUU	-.17UU	-.168U	-.164U
18U.UUU	-.164U	-.162U	-.165U
225.UUU	-.165U	-.162U	-.162U
27U.UUU	-.162U	-.166U	-.163U

MACH (1) = .598 BETA (3) = 5.23U

X/LNP	.250	.500	.750
PHI			
.UUU	-.167U	-.159U	
9U.UUU	-.164U	-.161U	-.161U
135.UUU	-.16UU	-.166U	-.165U
18U.UUU	-.16UU	-.161U	-.163U
225.UUU	-.158U	-.159U	-.161U
27U.UUU	-.157U	-.161U	-.161U

MACH (1) = .599 BETA (4) = 10.37U

X/LNP	.250	.500	.750
PHI			
.UUU	-.187U	-.172U	
9U.UUU	-.182U	-.177U	-.181U
135.UUU	-.177U	-.182U	-.184U
18U.UUU	-.179U	-.18UU	-.182U
225.UUU	-.175U	-.18UU	-.18UU
27U.UUU	-.18UU	-.183U	-.18UU

MACH (2) = .9U4 BETA (1) =-10.15U

X/LNP	.250	.500	.750
PHI			
.UUU	-.222U	-.217U	
9U.UUU	-.221U	-.215U	-.215U
135.UUU	-.222U	-.221U	-.216U
18U.UUU	-.217U	-.222U	-.223U
225.UUU	-.216U	-.222U	-.219U

AMES 11-7ft OA12 O2A UPPER MPS NOZZLE (RBPD02)

SECTION (11)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .904 BETA (1) =-10.150

X/LNP	.250	.500	.750
PHI			
270.000	-.218	-.222	-.224

MACH (2) = .901 BETA (2) = -5.040

X/LNP	.250	.500	.750
PHI			
.000	-.193	-.194	
90.000	-.192	-.189	-.195
135.000	-.194	-.193	-.195
180.000	-.188	-.192	-.194
225.000	-.188	-.188	-.192
270.000	-.193	-.195	-.191

MACH (2) = .903 BETA (3) = 5.290

X/LNP	.250	.500	.750
PHI			
.000	-.196	-.184	
90.000	-.193	-.188	-.192
135.000	-.187	-.192	-.193
180.000	-.184	-.191	-.192
225.000	-.189	-.192	-.193
270.000	-.188	-.196	-.189

MACH (2) = .905 BETA (4) = 10.500

X/LNP	.250	.500	.750
PHI			
.000	-.206	-.205	
90.000	-.204	-.211	-.206
135.000	-.205	-.214	-.203
180.000	-.206	-.213	-.214
225.000	-.210	-.212	-.209
270.000	-.211	-.216	-.212

AMES 11-7X7 OA12 02A UPPER MPS NOZZLE (RBPD03) (01 MAY 73)

REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .596 BETA (1) =-10.080

X/LNP	.250	.500	.750
PHI			
.000	-.1930	-.1910	
90.000	-.1940	-.1930	-.1870
135.000	-.1940	-.1960	-.1890
180.000	-.1930	-.1930	-.1910
225.000	-.1930	-.1930	-.1890
270.000	-.1920	-.1950	-.1890

MACH (1) = .599 BETA (2) = -4.990

X/LNP	.250	.500	.750
PHI			
.000	-.1810	-.1700	
90.000	-.1750	-.1710	-.1740
135.000	-.1720	-.1780	-.1760
180.000	-.1750	-.1720	-.1720
225.000	-.1750	-.1740	-.1730
270.000	-.1720	-.1720	-.1730

MACH (1) = .598 BETA (3) = 5.190

X/LNP	.250	.500	.750
PHI			
.000	-.1690	-.1660	
90.000	-.1680	-.1650	-.1680
135.000	-.1690	-.1710	-.1680
180.000	-.1690	-.1700	-.1660
225.000	-.1690	-.1670	-.1670
270.000	-.1670	-.1660	-.1660

MACH (1) = .598 BETA (4) = 10.300

X/LNP	.250	.500	.750
PHI			
.000	-.1950	-.1880	
90.000	-.1930	-.1910	-.1880
135.000	-.1910	-.1920	-.1890
180.000	-.1880	-.1950	-.1860
225.000	-.1870	-.1890	-.1860
270.000	-.1850	-.1900	-.1860

MACH (2) = .904 BETA (1) =-10.210

X/LNP	.250	.500	.750
PHI			
.000	-.2180	-.2130	
90.000	-.2170	-.2190	-.2180
135.000	-.2180	-.2150	-.2180
180.000	-.2140	-.2180	-.2180
225.000	-.2170	-.2170	-.2160

AMES 11-FT OA12 OA UPPER MPS NOZZLE (RBFDU3)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .904 BETA (1) =-10.21U

X/LNP	.25U	.50U	.75U
PHI			
270.000	-.213U	-.220U	-.218U

MACH (2) = .90U BETA (2) = -5.07U

X/LNP	.25U	.50U	.75U
PHI			
.000	-.188U	-.185U	
90.000	-.185U	-.191U	-.186U
135.000	-.187U	-.189U	-.185U
180.000	-.185U	-.187U	-.189U
225.000	-.188U	-.188U	-.188U
270.000	-.188U	-.186U	-.189U

MACH (2) = .901 BETA (3) = 5.25U

X/LNP	.25U	.50U	.75U
PHI			
.000	-.180U	-.175U	
90.000	-.182U	-.176U	-.179U
135.000	-.188U	-.177U	-.177U
180.000	-.181U	-.176U	-.181U
225.000	-.175U	-.174U	-.181U
270.000	-.176U	-.179U	-.184U

MACH (2) = .904 BETA (4) = 10.43U

X/LNP	.25U	.50U	.75U
PHI			
.000	-.215U	-.208U	
90.000	-.211U	-.209U	-.209U
135.000	-.211U	-.207U	-.207U
180.000	-.215U	-.207U	-.214U
225.000	-.211U	-.209U	-.208U
270.000	-.206U	-.217U	-.206U

AMES 11-7U7 OA12 OBA UPPER MPS NOZZLE (RBPD04) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0374 SCALE

PARAMETRIC DATA

ALPHA = 10.000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) =-10.110

X/LNP	.250	.500	.750
PHI			
.000	-.2080	-.2090	
90.000	-.2050	-.2070	-.2110
135.000	-.2070	-.2130	-.2070
180.000	-.2090	-.2060	-.2110
225.000	-.2130	-.2110	-.2120
270.000	-.2080	-.2110	-.2140

MACH (1) = .598 BETA (2) = -5.020

X/LNP	.250	.500	.750
PHI			
.000	-.1950	-.1970	
90.000	-.1910	-.1950	-.1890
135.000	-.1950	-.1940	-.1890
180.000	-.1940	-.1930	-.1880
225.000	-.1870	-.1910	-.1870
270.000	-.1910	-.1910	-.1920

MACH (1) = .596 BETA (3) = 5.170

X/LNP	.250	.500	.750
PHI			
.000	-.1930	-.1820	
90.000	-.1870	-.1810	-.1840
135.000	-.1920	-.1830	-.1770
180.000	-.1850	-.1780	-.1820
225.000	-.1840	-.1850	-.1850
270.000	-.1850	-.1860	-.1790

MACH (1) = .59[illegible] BETA (4) = 10.270

X/LNP	.250	.500	.750
PHI			
.000	-.2230	-.2130	
90.000	-.2180	-.2130	-.2130
135.000	-.2150	-.2120	-.2120
180.000	-.2180	-.2100	-.2110
225.000	-.2130	-.2060	-.2080
270.000	-.2110	-.2100	-.2070

MACH (2) = .902 BETA (1) =-10.230

X/LNP	.250	.500	.750
PHI			
.000	-.2330	-.2240	
90.000	-.2320	-.2240	-.2260
135.000	-.2260	-.2240	-.2250
180.000	-.2260	-.2300	-.2270
225.000	-.2280	-.2230	-.2250

AMES 11-7X7 OA12 O2A UPPER MPS NOZZLE (RBPD04)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .902 BETA (1) =-10.230

X/LNP	.250	.500	.750
PHI			
270.000	-.2260	-.2260	-.2260

MACH (2) = .904 BETA (2) = -5.070

X/LNP	.250	.500	.750
PHI			
.000	-.2070	-.2020	
90.000	-.2030	-.1990	-.1970
135.000	-.2050	-.2060	-.1930
180.000	-.2060	-.2040	-.1940
225.000	-.2040	-.1960	-.2000
270.000	-.2040	-.1990	-.2020

MACH (2) = .902 BETA (3) = 5.230

X/LNP	.250	.500	.750
PHI			
.000	-.1990	-.1940	
90.000	-.1960	-.1970	-.1930
135.000	-.2030	-.2020	-.1920
180.000	-.2050	-.2020	-.2030
225.000	-.2000	-.2000	-.1980
270.000	-.1990	-.1970	-.1970

MACH (2) = .907 BETA (4) = 10.390

X/LNP	.250	.500	.750
PHI			
.000	-.2180	-.2260	
90.000	-.2170	-.2260	-.2210
135.000	-.2160	-.2260	-.2200
180.000	-.2180	-.2320	-.2300
225.000	-.2210	-.2270	-.2290
270.000	-.2280	-.2280	-.2250

AMES 11-7U7 OA12 C2A UPPER MPS NOZZLE (RBPD05) (01 MAY 73)

REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 15.000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) =-10.090

X/LNP	.250	.500	.750
PHI			
.000	-.2400	-.2360	
90.000	-.2390	-.2390	-.2290
135.000	-.2370	-.2390	-.2390
180.000	-.2360	-.2390	-.2400
225.000	-.2340	-.2410	-.2390
270.000	-.2350	-.2350	-.2400

MACH (1) = .598 BETA (2) = -5.000

X/LNP	.250	.500	.750
PHI			
.000	-.2250	-.2250	
90.000	-.2240	-.2260	-.2240
135.000	-.2260	-.2270	-.2190
180.000	-.2240	-.2240	-.2220
225.000	-.2270	-.2160	-.2210
270.000	-.2260	-.2240	-.2240

MACH (1) = .596 BETA (3) = 5.180

X/LNP	.250	.500	.750
PHI			
.000	-.2170	-.2180	
90.000	-.2160	-.2180	-.2190
135.000	-.2150	-.2220	-.2170
180.000	-.2210	-.2200	-.2230
225.000	-.2170	-.2190	-.2200
270.000	-.2170	-.2280	-.2270

MACH (1) = .600 BETA (4) = 10.290

X/LNP	.250	.500	.750
PHI			
.000	-.2430	-.2360	
90.000	-.2390	-.2390	-.2380
135.000	-.2380	-.2460	-.2330
180.000	-.2340	-.2360	-.2430
225.000	-.2420	-.2370	-.2450
270.000	-.2380	-.2420	-.2340

MACH (2) = .904 BETA (1) =-10.200

X/LNP	.250	.500	.750
PHI			
.000	-.2640	-.2610	
90.000	-.2600	-.2600	-.2540
135.000	-.2610	-.2590	-.2540
180.000	-.2600	-.2580	-.2570
225.000	-.2580	-.2600	-.2590

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AMES 11-7U7 OA12 02A UPPER MPS NOZZLE (RBPD05)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .9U4 BETA (1) =-1U.2U0

X/LNP	.25U	.5U0	.75U
PHI			
27U.0U0	-.261U	-.258U	-.261U

MACH (2) = .9U2 BETA (2) = -5.05U

X/LNP	.25U	.5U0	.75U
PHI			
.0U0	-.24U0	-.244U	
9U.0U0	-.235U	-.242U	-.237U
135.0U0	-.237U	-.246U	-.236U
18U.0U0	-.238U	-.243U	-.241U
225.0U0	-.236U	-.238U	-.241U
27U.0U0	-.244U	-.245U	-.243U

MACH (2) = .9U4 BETA (3) = 5.22U

X/LNP	.25U	.5U0	.75U
PHI			
.0U0	-.248U	-.25U0	
9U.0U0	-.251U	-.252U	-.25U0
135.0U0	-.248U	-.255U	-.247U
18U.0U0	-.252U	-.242U	-.246U
225.0U0	-.257U	-.237U	-.251U
27U.0U0	-.253U	-.248U	-.246U

MACH (2) = .9U4 BETA (4) = 10.39U

X/LNP	.25U	.5U0	.75U
PHI			
.0U0	-.261U	-.265U	
9U.0U0	-.254U	-.265U	-.264U
135.0U0	-.258U	-.268U	-.257U
18U.0U0	-.261U	-.268U	-.258U
225.0U0	-.26U0	-.26U0	-.256U
27U.0U0	-.264U	-.269U	-.256U

AMES 11-7X7 OA12 O2A UPPER MPS NOZZLE (RBPD06) (01 MAY 73)

REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0350 SCALE

PARAMETRIC DATA

ALPHA = 20.000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .596 BETA (1) =-10.030

X/LNP	.250	.500	.750
PHI			
.000	-.2810	-.2720	
90.000	-.2790	-.2750	-.2760
135.000	-.2820	-.2790	-.2700
180.000	-.2750	-.2790	-.2730
225.000	-.2790	-.2730	-.2750
270.000	-.2790	-.2740	-.2770

MACH (1) = .597 BETA (2) = -4.970

X/LNP	.250	.500	.750
PHI			
.000	-.2620	-.2590	
90.000	-.2540	-.2550	-.2550
135.000	-.2590	-.2540	-.2540
180.000	-.2560	-.2600	-.2550
225.000	-.2510	-.2540	-.2570
270.000	-.2520	-.2490	-.2550

MACH (1) = .597 BETA (3) = 5.210

X/LNP	.250	.500	.750
PHI			
.000	-.2590	-.2640	
90.000	-.2640	-.2700	-.2610
135.000	-.2640	-.2670	-.2620
180.000	-.2620	-.2640	-.2650
225.000	-.2630	-.2620	-.2630
270.000	-.2640	-.2710	-.2720

MACH (1) = .599 BETA (4) = 10.360

X/LNP	.250	.500	.750
PHI			
.000	-.2730	-.2820	
90.000	-.2790	-.2850	-.2880
135.000	-.2890	-.2820	-.2860
180.000	-.2800	-.2810	-.2840
225.000	-.2810	-.2820	-.2870
270.000	-.2750	-.2890	-.2810

MACH (2) = .902 BETA (1) =-10.110

X/LNP	.250	.500	.750
PHI			
.000	-.3160	-.3090	
90.000	-.3080	-.3030	-.3110
135.000	-.3130	-.3110	-.3060
180.000	-.3110	-.3060	-.3060
225.000	-.3100	-.3070	-.3060

AMES 11-7U7 OA12 02A UPPER MPS NOZZLE (RBPD06)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .902 BETA (1) =-10.110

X/LNP	.250	.500	.750
PHI			
270.000	-.3120	-.3120	-.3070

MACH (2) = .900 BETA (2) = -5.020

X/LNP	.250	.500	.750
PHI			
.000	-.3040	-.3030	
90.000	-.3020	-.3020	-.3000
135.000	-.3060	-.3060	-.2950
180.000	-.3020	-.3000	-.2990
225.000	-.3050	-.3010	-.3000
270.000	-.3000	-.3080	-.3020

MACH (2) = .904 BETA (3) = 5.260

X/LNP	.250	.500	.750
PHI			
.000	-.3030	-.3010	
90.000	-.3060	-.2990	-.3070
135.000	-.3000	-.2960	-.3080
180.000	-.2980	-.3030	-.3210
225.000	-.3030	-.3020	-.3000
270.000	-.3020	-.3040	-.2940

MACH (2) = .905 BETA (4) = 10.430

X/LNP	.250	.500	.750
PHI			
.000	-.3140	-.3070	
90.000	-.3060	-.3080	-.3220
135.000	-.3140	-.3020	-.3220
180.000	-.3090	-.3140	-.3110
225.000	-.3080	-.3120	-.3070
270.000	-.3150	-.3170	-.2980

AMES 11-FT OA12 OEA UPPER MPS NOZZLE (RBPDU7) (01 MAY 73)

REFERENCE DATA

SREF = 2.421 SQ.FT. XMRP = 28.530 INCHES
LREF = 39.849 INCHES YMRP = .000 INCHES
BREF = 39.849 INCHES ZMRP = .000 INCHES
SCALE = .093 SCALE

PARAMETRIC DATA

ALPHA = .00 RUDDER = -10.00
ELEVON = .00 RUDFLR = .00

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -7.980

X/LNP	.250	.500	.750
PHI			
.00	-.184	-.175	
90.00	-.180	-.173	-.177
135.00	-.178	-.179	-.178
180.00	-.177	-.178	-.177
225.00	-.176	-.178	-.173
270.00	-.173	-.181	-.171

MACH (1) = .600 BETA (2) = -3.940

X/LNP	.250	.500	.750
PHI			
.00	-.163	-.164	
90.00	-.161	-.164	-.165
135.00	-.164	-.163	-.162
180.00	-.161	-.165	-.161
225.00	-.161	-.163	-.161
270.00	-.164	-.163	-.164

MACH (1) = .600 BETA (3) = .090

X/LNP	.250	.500	.750
PHI			
.00	-.163	-.159	
90.00	-.158	-.165	-.164
135.00	-.163	-.164	-.165
180.00	-.161	-.166	-.165
225.00	-.163	-.161	-.163
270.00	-.159	-.168	-.162

MACH (1) = .999 BETA (4) = 4.210

X/LNP	.250	.500	.750
PHI			
.00	-.172	-.170	
90.00	-.167	-.168	-.173
135.00	-.167	-.167	-.170
180.00	-.169	-.168	-.171
225.00	-.166	-.168	-.170
270.00	-.167	-.172	-.167

MACH (1) = .997 BETA (5) = 8.320

X/LNP	.250	.500	.750
PHI			
.00	-.183	-.179	
90.00	-.176	-.179	-.175
135.00	-.176	-.180	-.176
180.00	-.178	-.179	-.179
225.00	-.178	-.178	-.179

AMES 11-7U7 OA12 O2A UPPER MPS NOZZLE (RBFDU7)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .897 BETA (5) = 8.320

X/LNP	.250	.500	.750
PHI			
270.000	-.1750	-.1810	-.1770

MACH (2) = .902 BETA (1) = -8.090

X/LNP	.250	.500	.750
PHI			
.000	-.2130	-.2150	
90.000	-.2110	-.2160	-.2070
135.000	-.2150	-.2150	-.2060
180.000	-.2110	-.2110	-.2030
225.000	-.2110	-.2090	-.2010
270.000	-.2150	-.2080	-.2020

MACH (2) = .901 BETA (2) = -4.000

X/LNP	.250	.500	.750
PHI			
.000	-.1820	-.1840	
90.000	-.1810	-.1880	-.1770
135.000	-.1840	-.1830	-.1770
180.000	-.1820	-.1760	-.1810
225.000	-.1810	-.1840	-.1730
270.000	-.1780	-.1840	-.1770

MACH (2) = .903 BETA (3) = .090

X/LNP	.250	.500	.750
PHI			
.000	-.1860	-.1810	
90.000	-.1790	-.1840	-.1860
135.000	-.1830	-.1830	-.1830
180.000	-.1840	-.1850	-.1840
225.000	-.1820	-.1860	-.1810
270.000	-.1770	-.1890	-.1810

MACH (2) = .902 BETA (4) = 4.260

X/LNP	.250	.500	.750
PHI			
.000	-.1870	-.1830	
90.000	-.1840	-.1890	-.1890
135.000	-.1850	-.1910	-.1910
180.000	-.1840	-.1920	-.1910
225.000	-.1850	-.1930	-.1880
270.000	-.1810	-.1930	-.1940

MACH (2) = .903 BETA (5) = 8.440

X/LNP	.250	.500	.750
PHI			
.000	-.2010	-.2080	
90.000	-.2030	-.2080	-.2110
135.000	-.2140	-.2080	-.2100
180.000	-.2070	-.2080	-.2210
225.000	-.2050	-.2060	-.2100

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 O2A UPPER MPS NOZZLE (RBPD07)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .9U5 BETA (5) = 8.44U

X/LNP	.25U	.5UU	.75U
PHI			
27U.UUU	-.2U3U	-.214U	-.2U6U

AMES 11-707 OA12 OEA UPPER MPS NOZZLE (RBPD08) (01 MAY 73)

REFERENCE DATA

SREF	=	2.4210	SQ.FT.	XMRP	= 28.5300 INCHES
LREF	=	39.8490	INCHES	YMRP	= .0000 INCHES
BREF	=	39.8490	INCHES	ZMRP	= .0000 INCHES
SCALE	=	.0300	SCALE		

PARAMETRIC DATA

ALPHA	= 5.000	RUDDER	= -10.000
ELEVON	= .000	RUDFLR	= .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -8.040

X/LNP	.250	.500	.750
PHI			
.000	-.1760	-.1790	
90.000	-.1740	-.1820	-.1820
135.000	-.1800	-.1770	-.1770
180.000	-.1770	-.1760	-.1770
225.000	-.1800	-.1750	-.1810
270.000	-.1760	-.1760	-.1820

MACH (1) = .599 BETA (2) = -3.970

X/LNP	.250	.500	.750
PHI			
.000	-.1700	-.1690	
90.000	-.1690	-.1690	-.1710
135.000	-.1700	-.1700	-.1700
180.000	-.1700	-.1700	-.1670
225.000	-.1730	-.1730	-.1680
270.000	-.1700	-.1690	-.1670

MACH (1) = .600 BETA (3) = .090

X/LNP	.250	.500	.750
PHI			
.000	-.1680	-.1650	
90.000	-.1690	-.1700	-.1690
135.000	-.1700	-.1750	-.1710
180.000	-.1690	-.1670	-.1690
225.000	-.1720	-.1660	-.1690
270.000	-.1680	-.1700	-.1690

MACH (1) = .601 BETA (4) = 4.180

X/LNP	.250	.500	.750
PHI			
.000	-.1770	-.1770	
90.000	-.1770	-.1730	-.1770
135.000	-.1800	-.1730	-.1780
180.000	-.1710	-.1760	-.1710
225.000	-.1720	-.1750	-.1720
270.000	-.1750	-.1740	-.1750

MACH (1) = .601 BETA (5) = 8.260

X/LNP	.250	.500	.750
PHI			
.000	-.1860	-.1840	
90.000	-.1800	-.1890	-.1890
135.000	-.1830	-.1870	-.1860
180.000	-.1840	-.1890	-.1870
225.000	-.1840	-.1860	-.1890

AMES 11-7X7 OA12 OEA UPPER MPS NOZZLE (RBPD08)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .601 BETA (5) = 8.260

X/LNP	.250	.500	.750
PHI			
270.000	-.1800	-.1880	-.1850

MACH (2) = .900 BETA (1) = -8.140

X/LNP	.250	.500	.750
PHI			
.000	-.2050	-.1950	
90.000	-.2030	-.1990	-.1980
135.000	-.2040	-.1980	-.1960
180.000	-.2010	-.1940	-.1970
225.000	-.2010	-.1960	-.1980
270.000	-.1990	-.1970	-.1890

MACH (2) = .903 BETA (2) = -4.030

X/LNP	.250	.500	.750
PHI			
.000	-.1730	-.1710	
90.000	-.1720	-.1780	-.1780
135.000	-.1750	-.1780	-.1770
180.000	-.1720	-.1780	-.1840
225.000	-.1740	-.1730	-.1770
270.000	-.1720	-.1800	-.1860

MACH (2) = .901 BETA (3) = .090

X/LNP	.250	.500	.750
PHI			
.000	-.1800	-.1740	
90.000	-.1750	-.1790	-.1790
135.000	-.1790	-.1750	-.1750
180.000	-.1740	-.1740	-.1770
225.000	-.1740	-.1770	-.1770
270.000	-.1760	-.1830	-.1770

MACH (2) = .903 BETA (4) = 4.220

X/LNP	.250	.500	.750
PHI			
.000	-.1780	-.1790	
90.000	-.1790	-.1830	-.1810
135.000	-.1820	-.1860	-.1790
180.000	-.1810	-.1820	-.1890
225.000	-.1860	-.1800	-.1810
270.000	-.1790	-.1850	-.1820

MACH (2) = .901 BETA (5) = 8.370

X/LNP	.250	.500	.750
PHI			
.000	-.2020	-.1960	
90.000	-.2030	-.1980	-.1980
135.000	-.2050	-.2020	-.1980
180.000	-.2000	-.1980	-.2000
225.000	-.1980	-.1920	-.1990

DATE 18 SEP 7?

TABULATED PRESSURE DATA - OA12A

AMES 11-7?7 OA12 C2A UPPER MPS NOZZLE (RBFD?8)

SECTION (1)MPS NOZZLE

DEPENDENT VARIABLE CP

MACH (2) = .9?1 BETA (5) = 8.37?

X/LNP	.25?	.5??	.75?
PHI			
27?.???	-.193?	-.2?2?	-.2?3?

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPD09) (01 MAY 73)

AMES 11-7U7 OA12 O2A UPPER MPS NOZZLE

PARAMETRIC DATA

ALPHA = 10.000 RUDDER = -10.000
ELEVON = .000 RUDFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

SECTION (1)MPS NOZZLE

DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -8.060

X/LNP	.250	.500	.750
PHI			
.000	-.1970	-.1960	
90.000	-.1930	-.1960	-.1920
135.000	-.1960	-.1930	-.1920
180.000	-.1920	-.1930	-.1910
225.000	-.1960	-.1960	-.1900
270.000	-.1930	-.1960	-.1890

MACH (1) = .601 BETA (2) = -3.980

X/LNP	.250	.500	.750
PHI			
.000	-.1860	-.1860	
90.000	-.1880	-.1840	-.1820
135.000	-.1910	-.1850	-.1840
180.000	-.1830	-.1850	-.1830
225.000	-.1840	-.1820	-.1820
270.000	-.1890	-.1820	-.1810

MACH (1) = .600 BETA (3) = .090

X/LNP	.250	.500	.750
PHI			
.000	-.1820	-.1850	
90.000	-.1850	-.1840	-.1860
135.000	-.1870	-.1870	-.1860
180.000	-.1840	-.1840	-.1870
225.000	-.1860	-.1790	-.1830
270.000	-.1840	-.1870	-.1770

MACH (1) = .599 BETA (4) = 4.170

X/LNP	.250	.500	.750
PHI			
.000	-.1890	-.1840	
90.000	-.1870	-.1860	-.1870
135.000	-.1870	-.1920	-.1860
180.000	-.1840	-.1890	-.1870
225.000	-.1850	-.1890	-.1860
270.000	-.1850	-.1930	-.1900

MACH (1) = .599 BETA (5) = 8.240

X/LNP	.250	.500	.750
PHI			
.000	-.1970	-.2000	
90.000	-.1940	-.1980	-.1950
135.000	-.2000	-.1980	-.2010
180.000	-.1970	-.1950	-.1980
225.000	-.1920	-.1980	-.1990

AMES 11-7X7 OA12 C2A UPPER MPS NOZZLE (FREON 9)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .595 BETA (5) = 8.240

X/LNP	.250	.500	.750
PHI			
270.000	-.1980	-.2040	-.2010

MACH (2) = .904 BETA (1) = -8.160

X/LNP	.250	.500	.750
PHI			
.000	-.2080	-.2110	
90.000	-.2090	-.2150	-.2150
135.000	-.2160	-.2200	-.2140
180.000	-.2090	-.2190	-.2220
225.000	-.2120	-.2150	-.2160
270.000	-.2120	-.2190	-.2140

MACH (2) = .902 BETA (2) = -4.040

X/LNP	.250	.500	.750
PHI			
.000	-.1990	-.1930	
90.000	-.2000	-.1990	-.1930
135.000	-.1960	-.2020	-.1990
180.000	-.1990	-.1980	-.1980
225.000	-.2000	-.1930	-.1950
270.000	-.1970	-.1950	-.2010

MACH (2) = .899 BETA (3) = .090

X/LNP	.250	.500	.750
PHI			
.000	-.1950	-.1860	
90.000	-.1910	-.1890	-.1940
135.000	-.1950	-.1950	-.1970
180.000	-.1940	-.1930	-.1960
225.000	-.1920	-.1910	-.1950
270.000	-.1930	-.1920	-.1980

MACH (2) = .898 BETA (4) = 4.200

X/LNP	.250	.500	.750
PHI			
.000	-.2000	-.1970	
90.000	-.2010	-.1970	-.1970
135.000	-.2030	-.1980	-.1960
180.000	-.2000	-.1960	-.2000
225.000	-.2010	-.1950	-.1970
270.000	-.1980	-.1980	-.1970

MACH (2) = .900 BETA (5) = 8.330

X/LNP	.250	.500	.750
PHI			
.000	-.2050	-.2070	
90.000	-.2090	-.2060	-.2170
135.000	-.2150	-.2080	-.2160
180.000	-.2130	-.2140	-.2140
225.000	-.2070	-.2120	-.2100

AMES 11-7X7 OA12 O2A UPPER MPS NOZZLE (RBPD09)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .95X BETA (5) = 8.33X

X/LMP	.25X	.50X	.75X
ETA			
27X.1XX	-.25XX	-.215X	-.214X

AMES 11-7X7 OA12 OBA UPPER MPS NOZZLE (PBPDIN) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.530[illegible] INCHES
LREF = 39.849[illegible] INCHES YMRP = .0000 INCHES
BREF = 39.849[illegible] INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 15.000 RUDDER = -30.000
ELEVON = .000 RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -8.140

X/LNP	.250	.500	.750
PHI			
.000	-.2210	-.2290	
90.000	-.2240	-.2220	-.2180
135.000	-.2260	-.2240	-.2190
180.000	-.2230	-.2240	-.2260
225.000	-.2220	-.2240	-.2310
270.000	-.2230	-.2040	-.2240

MACH (1) = .599 BETA (2) = -3.980

X/LNP	.250	.500	.750
PHI			
.000	-.2150	-.2120	
90.000	-.2150	-.2130	-.2140
135.000	-.2130	-.2110	-.2120
180.000	-.2140	-.2150	-.2150
225.000	-.2150	-.2130	-.2130
270.000	-.2110	-.2170	-.2150

MACH (1) = .598 BETA (3) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.2350	-.2310	
90.000	-.2320	-.2280	-.2240
135.000	-.2320	-.2250	-.2220
180.000	-.2270	-.2240	-.2250
225.000	-.2260	-.2270	-.2210
270.000	-.2300	-.2280	-.2260

MACH (1) = .598 BETA (4) = 4.170

X/LNP	.250	.500	.750
PHI			
.000	-.2320	-.2300	
90.000	-.2350	-.2220	-.2230
135.000	-.2350	-.2310	-.2260
180.000	-.2350	-.2310	-.2230
225.000	-.2330	-.2280	-.2210
270.000	-.2270	-.2260	-.2250

MACH (1) = .601 BETA (5) = 8.250

X/LNP	.250	.500	.750
PHI			
.000	-.2380	-.2360	
90.000	-.2350	-.2430	-.2410
135.000	-.2410	-.2440	-.2390
180.000	-.2360	-.2320	-.2360
225.000	-.2380	-.2380	-.2380

AMES 11-7X7 OA12 OA UPPER MPS NOZZLE (RBPD11)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .601 BETA (5) = 8.250

X/LNP	.250	.500	.750
PHI			
270.000	-.2360	-.2450	-.2380

MACH (2) = .902 BETA (1) = -8.130

X/LNP	.250	.500	.750
PHI			
.000	-.2350	-.2300	
90.000	-.2340	-.2330	-.2380
135.000	-.2360	-.2370	-.2330
180.000	-.2360	-.2340	-.2380
225.000	-.2330	-.2340	-.2350
270.000	-.2290	-.2420	-.2340

MACH (2) = .899 BETA (2) = -4.020

X/LNP	.250	.500	.750
PHI			
.000	-.2410	-.2360	
90.000	-.2320	-.2320	-.2350
135.000	-.2360	-.2360	-.2370
180.000	-.2330	-.2350	-.2360
225.000	-.2340	-.2310	-.2320
270.000	-.2340	-.2380	-.2410

MACH (2) = .901 BETA (3) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.2400	-.2310	
90.000	-.2340	-.2350	-.2440
135.000	-.2360	-.2370	-.2360
180.000	-.2340	-.2360	-.2420
225.000	-.2340	-.2360	-.2440
270.000	-.2320	-.2440	-.2420

MACH (2) = .901 BETA (4) = 4.200

X/LNP	.250	.500	.750
PHI			
.000	-.2490	-.2410	
90.000	-.2380	-.2440	-.2410
135.000	-.2410	-.2490	-.2380
180.000	-.2370	-.2460	-.2390
225.000	-.2360	-.2400	-.2370
270.000	-.2360	-.2460	-.2450

MACH (2) = .900 BETA (5) = 8.330

X/LNP	.250	.500	.750
PHI			
.000	-.2600	-.2550	
90.000	-.2520	-.2550	-.2540
135.000	-.2580	-.2630	-.2530
180.000	-.2560	-.2620	-.2560
225.000	-.2440	-.2610	-.2440

DATE 18 SEP 81 TABULATED PRESSURE DATA - OA12A

AMES 11-7X7 OA12 O2A UPPER MPS NOZZLE (RBPD10)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .900 BETA (5) = 0.330

X/LNP	.250	.500	.750
PHI			
270.000	-.2560	-.2560	-.2410

AMES 11-7?7 OA12 OEA UPPER MPS NOZZLE (RBPD11) (01 MAY 73)

REFERENCE DATA

SREF = 2.421? SQ.FT. XMRP = 28.53?? INCHES
LREF = 39.849? INCHES YMRP = .???? INCHES
BREF = 39.849? INCHES ZMRP = .???? INCHES
SCALE = .?3?? SCALE

PARAMETRIC DATA

ALPHA = 2?.??? RUDDER = -1?.???
ELEVON = .??? RUDFLR = .???

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -7.99?

X/LNP	.29?	.9??	.79?
PHI			
.???	-.268?	-.263?	
9?.???	-.262?	-.261?	-.264?
135.???	-.263?	-.264?	-.262?
18?.???	-.267?	-.262?	-.262?
225.???	-.261?	-.262?	-.264?
27?.???	-.264?	-.262?	-.262?

MACH (1) = .598 BETA (2) = -3.98?

X/LNP	.29?	.9??	.79?
PHI			
.???	-.259?	-.258?	
9?.???	-.257?	-.254?	-.254?
135.???	-.257?	-.253?	-.254?
18?.???	-.254?	-.257?	-.251?
225.???	-.259?	-.254?	-.259?
27?.???	-.254?	-.254?	-.257?

MACH (1) = .598 BETA (3) = .08?

X/LNP	.29?	.9??	.79?
PHI			
.???	-.27??	-.273?	
9?.???	-.269?	-.27??	-.271?
135.???	-.274?	-.27??	-.274?
18?.???	-.272?	-.27??	-.274?
225.???	-.27??	-.273?	-.27??
27?.???	-.273?	-.27??	-.273?

MACH (1) = .598 BETA (4) = 4.19?

X/LNP	.29?	.9??	.79?
PHI			
.???	-.27??	-.272?	
9?.???	-.267?	-.269?	-.27??
135.???	-.272?	-.269?	-.277?
18?.???	-.273?	-.27??	-.272?
225.???	-.26*	-.272?	-.269?
27?.???	-.269?	-.272?	-.27??

MACH (1) = .600 BETA (5) = 8.31?

X/LNP	.29?	.9??	.79?
PHI			
.???	-.272?	-.27??	
9?.???	-.27??	-.275?	-.282?
135.???	-.27??	-.271?	-.282?
18?.???	-.279?	-.283?	-.282?
225.???	-.28??	-.27??	-.28??

AMES 11-7X7 OA12 OBA UPPER MPS NOZZLE (RBPC11)

SECTION (1) MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .800 BETA (5) = 8.310

X/LNP	.250	.500	.750
PHI			
270.000	-.2730	-.2770	-.2800

MACH (2) = .903 BETA (1) = -8.080

X/LNP	.250	.500	.750
PHI			
.000	-.2990	-.2960	
90.000	-.2990	-.2990	-.2970
135.000	-.3040	-.2990	-.2950
180.000	-.2970	-.3010	-.2970
225.000	-.2940	-.2920	-.2910
270.000	-.2930	-.2930	-.2930

MACH (2) = .900 BETA (2) = -3.980

X/LNP	.250	.500	.750
PHI			
.000	-.2940	-.2910	
90.000	-.2940	-.2960	-.2940
135.000	-.2920	-.2940	-.2930
180.000	-.2940	-.2970	-.2960
225.000	-.2920	-.2910	-.2920
270.000	-.2910	-.2930	-.2960

MACH (2) = .900 BETA (3) = .090

X/LNP	.250	.500	.750
PHI			
.000	-.3050	-.3030	
90.000	-.2980	-.2980	-.3000
135.000	-.2990	-.3040	-.3060
180.000	-.3040	-.3080	-.3130
225.000	-.3080	-.3070	-.3040
270.000	-.2990	-.3080	-.3040

MACH (2) = .900 BETA (4) = 4.230

X/LNP	.250	.500	.750
PHI			
.000	-.3060	-.3060	
90.000	-.3020	-.2980	-.2980
135.000	-.3110	-.3040	-.3020
180.000	-.3010	-.3080	-.3060
225.000	-.3010	-.3060	-.3080
270.000	-.3110	-.3060	-.3060

MACH (2) = .901 BETA (5) = 8.360

X/LNP	.250	.500	.750
PHI			
.000	-.3150	-.3120	
90.000	-.3010	-.3090	-.3180
135.000	-.3080	-.3120	-.3160
180.000	-.3080	-.3120	-.3130
225.000	-.3160	-.3020	-.3030

DATE 18 SEP 79 TABULATED PRESSURE DATA - OA12A

AMES 11-7X7 OA12 OEA UPPER MPS NOZZLE (RBFD11)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .9X1 BETA (X) = 0.36X

X/LNP	.25X	.5XX	.7XX
PHI			
27X.XXX	-.319X	-.312X	-.315X

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A PAGE 55

AMES 11-7X7 OA12 OBA UPPER MPS NOZZLE (RBED12) (1) MAY 73)

REFERENCE DATA

SREF = 2.421(SQ.FT. XMRP = 28.53((INCHES
LREF = 39.849(INCHES YMRP = .(((INCHES
BREF = 39.849(INCHES ZMRP = .(((INCHES
SCALE = .(3((SCALE

PARAMETRIC DATA

ALPHA = .(((RUDDER = -2(.(((
ELEVON = .(((RUDELR = .(((

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -7.97(

X/LNP	.25(	.5((	.75(
PHI			
.(((	-.192(	-.171(	
9(.(((	-.178(	-.177(	-.173(
135.(((	-.181(	-.178(	-.173(
18(.(((	-.174(	-.172(	-.181(
225.(((	-.174(	-.17((	-.173(
27(.(((	-.175(	-.18((	-.172(

MACH (1) = .6((BETA (2) = -3.93(

X/LNP	.25(	.5((	.75(
PHI			
.(((	-.193(	-.178(	
9(.(((	-.179(	-.176(	-.176(
135.(((	-.185(	-.181(	-.174(
18(.(((	-.178(	-.173(	-.179(
225.(((	-.178(	-.172(	-.173(
27(.(((	-.177(	-.177(	-.175(

MACH (1) = .599 BETA (3) = .1((

X/LNP	.25(	.5((	.75(
PHI			
.(((	-.175(	-.17((	
9(.(((	-.172(	-.172(	-.171(
135.(((	-.174(	-.173(	-.17((
18(.(((	-.17((	-.173(	-.177(
225.(((	-.166(	-.168(	-.171(
27(.(((	-.169(	-.176(	-.172(

MACH (1) = .6(1 BETA (4) = 4.21(

X/LNP	.25(	.5((	.75(
PHI			
.(((	-.19((	-.183(	
9(.(((	-.186(	-.183(	-.184(
135.(((	-.187(	-.183(	-.184(
18(.(((	-.179(	-.185(	-.187(
225.(((	-.182(	-.18((	-.181(
27(.(((	-.18((	-.186(	-.18((

MACH (1) = .598 BETA (5) = 8.33(

X/LNP	.25(	.5((	.75(
PHI			
.(((	-.195(	-.188(	
9(.(((	-.191(	-.185(	-.183(
135.(((	-.189(	-.188(	-.188(
18(.(((	-.188(	-.189(	-.191(
225.(((	-.186(	-.19((	-.185(

DATE 14 SEP 71 TABULATED PRESSURE DATA - OA12A

AMES 11-7X7 OA12 OEA UPPER MPS NOZZLE (RBPD12)

SECTION : 1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (5) = 8.330

X/LNP	.250	.500	.750
PHI			
270.000	-.1870	-.1920	-.1870

MACH (2) = .901 BETA (1) = -8.090

X/LNP	.250	.500	.750
PHI			
.000	-.2020	-.1990	
90.000	-.1930	-.1990	-.2040
135.000	-.1980	-.2020	-.2050
180.000	-.1930	-.2010	-.2110
225.000	-.1960	-.2000	-.2070
270.000	-.1990	-.2060	-.2050

MACH (2) = .904 BETA (2) = -4.000

X/LNP	.250	.500	.750
PHI			
.000	-.2000	-.1850	
90.000	-.1920	-.1860	-.1820
135.000	-.1930	-.1910	-.1830
180.000	-.1870	-.1870	-.1850
225.000	-.1880	-.1850	-.1780
270.000	-.1850	-.1880	-.1820

MACH (2) = .900 BETA (3) = .100

X/LNP	.250	.500	.750
PHI			
.000	-.1910	-.1880	
90.000	-.1910	-.1840	-.1850
135.000	-.1970	-.1890	-.1880
180.000	-.1910	-.1910	-.1910
225.000	-.1930	-.1910	-.1910
270.000	-.1920	-.1910	-.1910

MACH (2) = .900 BETA (4) = 4.280

X/LNP	.250	.500	.750
PHI			
.000	-.1920	-.1880	
90.000	-.1910	-.1940	-.1970
135.000	-.1980	-.1940	-.1950
180.000	-.1870	-.1980	-.1990
225.000	-.1920	-.1980	-.1980
270.000	-.1890	-.1960	-.1930

MACH (2) = .903 BETA (5) = 8.450

X/LNP	.250	.500	.750
PHI			
.000	-.2170	-.2180	
90.000	-.2110	-.2180	-.2220
135.000	-.2150	-.2180	-.2160
180.000	-.2090	-.2180	-.2240
225.000	-.2120	-.2240	-.2180

DATE 18 DEC 81 TABULATED PRESSURE DATA - OA12A (RBFD12)

AMES 11-7X7 OA12 OEA UPPER MPS NOZZLE

SECTION (1) MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .900 BETA (5) = 0.450

X/LNF	.25( )	.50( )	.75( )
PHI			
270.000	-.213( )	-.225( )	-.213( )

AMES 11-7U7 OA12 OEA UPPER MPS NOZZLE (RBFD13) [illegible] MAY 73

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = -20.000
ELEVON = .000 RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -8.050

X/LNP	.250	.500	.750
PHI			
.000	-.1990	-.1820	
90.000	-.1850	-.1830	-.1860
135.000	-.1850	-.1830	-.1860
180.000	-.1860	-.1870	-.1860
225.000	-.1810	-.1820	-.1840
270.000	-.1830	-.1870	-.1870

MACH (1) = .599 BETA (2) = -3.970

X/LNP	.250	.500	.750
PHI			
.000	-.1920	-.1780	
90.000	-.1790	-.1730	-.1750
135.000	-.1840	-.1760	-.1750
180.000	-.1740	-.1730	-.1770
225.000	-.1730	-.1750	-.1760
270.000	-.1740	-.1800	-.1730

MACH (1) = .598 BETA (3) = .100

X/LNP	.250	.500	.750
PHI			
.000	-.1910	-.1810	
90.000	-.1870	-.1820	-.1820
135.000	-.1840	-.1780	-.1810
180.000	-.1820	-.1760	-.1790
225.000	-.1810	-.1840	-.1780
270.000	-.1820	-.1860	-.1760

MACH (1) = .599 BETA (4) = 4.180

X/LNP	.250	.500	.750
PHI			
.000	-.1900	-.1850	
90.000	-.1860	-.1880	-.1820
135.000	-.1910	-.1860	-.1840
180.000	-.1830	-.1840	-.1870
225.000	-.1850	-.1850	-.1830
270.000	-.1820	-.1890	-.1870

MACH (1) = .600 BETA (5) = 8.270

X/LNP	.250	.500	.750
PHI			
.000	-.2040	-.1920	
90.000	-.1940	-.1960	-.1980
135.000	-.1960	-.1940	-.1930
180.000	-.1920	-.1960	-.1940
225.000	-.1940	-.1940	-.1940

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBTD13)

AMES 11-7X7 OA12 OEA UPPER MPS NOZZLE

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .6[illegible] BETA (5) = 8.2[illegible]

X/LNP	.25[illegible]	.5[illegible]	.75[illegible]
PHI			
270.[illegible]	-.191[illegible]	-.198[illegible]	-.195[illegible]

MACH (2) = .9[illegible]7 BETA (1) = -8.14[illegible]

X/LNP	.25[illegible]	.5[illegible]	.75[illegible]
PHI			
.[illegible]	-.18[illegible]	-.189[illegible]	
90.[illegible]	-.179[illegible]	-.189[illegible]	-.197[illegible]
135.[illegible]	-.186[illegible]	-.196[illegible]	-.197[illegible]
180.[illegible]	-.183[illegible]	-.197[illegible]	-.203[illegible]
225.[illegible]	-.184[illegible]	-.197[illegible]	-.203[illegible]
270.[illegible]	-.188[illegible]	-.199[illegible]	-.203[illegible]

MACH (2) = .899 BETA (2) = -4.12[illegible]

X/LNP	.25[illegible]	.5[illegible]	.75[illegible]
PHI			
.[illegible]	-.183[illegible]	-.179[illegible]	
90.[illegible]	-.186[illegible]	-.181[illegible]	-.181[illegible]
135.[illegible]	-.183[illegible]	-.183[illegible]	-.181[illegible]
180.[illegible]	-.186[illegible]	-.182[illegible]	-.179[illegible]
225.[illegible]	-.181[illegible]	-.181[illegible]	-.181[illegible]
270.[illegible]	-.179[illegible]	-.182[illegible]	-.178[illegible]

MACH (2) = .9[illegible]1 BETA (3) = .1[illegible]

X/LNP	.25[illegible]	.5[illegible]	.75[illegible]
PHI			
.[illegible]	-.182[illegible]	-.179[illegible]	
90.[illegible]	-.181[illegible]	-.181[illegible]	-.187[illegible]
135.[illegible]	-.184[illegible]	-.184[illegible]	-.187[illegible]
180.[illegible]	-.178[illegible]	-.181[illegible]	-.181[illegible]
225.[illegible]	-.186[illegible]	-.181[illegible]	-.181[illegible]
270.[illegible]	-.179[illegible]	-.186[illegible]	-.184[illegible]

MACH (2) = .903 BETA (4) = 4.23[illegible]

X/LNP	.25[illegible]	.5[illegible]	.75[illegible]
PHI			
.[illegible]	-.194[illegible]	-.194[illegible]	
90.[illegible]	-.196[illegible]	-.189[illegible]	-.189[illegible]
135.[illegible]	-.196[illegible]	-.187[illegible]	-.19[illegible]
180.[illegible]	-.187[illegible]	-.191[illegible]	-.191[illegible]
225.[illegible]	-.191[illegible]	-.192[illegible]	-.187[illegible]
270.[illegible]	-.192[illegible]	-.193[illegible]	-.187[illegible]

MACH (2) = .902 BETA (5) = 8.38[illegible]

X/LNP	.25[illegible]	.5[illegible]	.75[illegible]
PHI			
.[illegible]	-.202[illegible]	-.208[illegible]	
90.[illegible]	-.202[illegible]	-.211[illegible]	-.208[illegible]
135.[illegible]	-.205[illegible]	-.214[illegible]	-.208[illegible]
180.[illegible]	-.206[illegible]	-.207[illegible]	-.207[illegible]
225.[illegible]	-.202[illegible]	-.211[illegible]	-.203[illegible]

AMES 11-7[illegible] OA12 OBA UPPER MPS NOZZLE (RBPD13)

SECTION / 1) MPS NOZZLE DEPENDENT VARIABLE CP

MACH [illegible] BETA (5) = 0.58

X/LNF	.25	.50	.75
PHI			
27[illegible]	-.2035	-.2060	-.2085

AMES 11-FT OA12 02A UPPER MFS NOZZLE (RBFD14) (11 MAY 75)

REFERENCE DATA

SREF = 8.421 SQ.FT XMRP = 28.530 INCHES
LREF = 39.849 INCHES YMRP = .000 INCHES
BREF = 39.849 INCHES ZMRP = .000 INCHES
SCALE = .030 SCALE

PARAMETRIC DATA

ALPHA = 10.000 RUDDER = -20.000
ELEVON = .000 RUDFLR = .000

SECTION (1)MFS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -8.160

X/LNP PHI	.250	.500	.750
.000	-.209	-.196	
90.000	-.196	-.196	-.214
135.000	-.204	-.206	-.193
180.000	-.197	-.195	-.199
225.000	-.194	-.194	-.193
270.000	-.192	-.201	-.192

MACH (1) = .600 BETA (2) = -3.980

X/LNP PHI	.250	.500	.750
.000	-.202	-.188	
90.000	-.196	-.188	-.192
135.000	-.194	-.191	-.184
180.000	-.192	-.192	-.191
225.000	-.188	-.189	-.188
270.000	-.187	-.192	-.187

MACH (1) = .599 BETA (3) = .180

X/LNP PHI	.250	.500	.750
.000	-.202	-.194	
90.000	-.196	-.194	-.193
135.000	-.196	-.193	-.206
180.000	-.192	-.194	-.199
225.000	-.193	-.194	-.193
270.000	-.195	-.206	-.193

MACH (1) = .599 BETA (4) = 4.170

X/LNP PHI	.250	.500	.750
.000	-.204	-.195	
90.000	-.197	-.194	-.195
135.000	-.200	-.194	-.195
180.000	-.195	-.197	-.198
225.000	-.199	-.197	-.195
270.000	-.195	-.198	-.193

MACH (1) = .602 BETA (5) = 8.250

X/LNP PHI	.250	.500	.750
.000	-.208	-.206	
90.000	-.199	-.206	-.214
135.000	-.203	-.203	-.213
180.000	-.199	-.203	-.211
225.000	-.203	-.209	-.208

DATE 18 DEC 91 TABULATED PRESSURE DATA - OA12A (RBFD14)

AMES 11-7?? OA12 02A UPPER MFS NOZZLE

SECTION (1)MFS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .902 BETA (5) = 8.250

X/LNP	.250	.500	.750
PHI			
270.000	-.2010	-.2080	-.2140

MACH (2) = .902 BETA (1) = -8.150

X/LNP	.250	.500	.750
PHI			
.000	-.2090	-.2050	
90.000	-.2050	-.2130	-.2160
135.000	-.2170	-.2110	-.2110
180.000	-.2050	-.2080	-.2150
225.000	-.2090	-.2080	-.2130
270.000	-.2110	-.2120	-.2120

MACH (2) = .901 BETA (2) = -4.040

X/LNP	.250	.500	.750
PHI			
.000	-.2070	-.1950	
90.000	-.2010	-.1920	-.1920
135.000	-.2020	-.1960	-.1930
180.000	-.1990	-.2020	-.1940
225.000	-.2070	-.1930	-.1920
270.000	-.1990	-.1960	-.1980

MACH (2) = .899 BETA (3) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.2150	-.2040	
90.000	-.2110	-.2040	-.1990
135.000	-.2110	-.2050	-.2020
180.000	-.2060	-.2060	-.2030
225.000	-.2050	-.2040	-.2030
270.000	-.2060	-.2090	-.1980

MACH (2) = .900 BETA (4) = 4.210

X/LNP	.250	.500	.750
PHI			
.000	-.2110	-.2030	
90.000	-.2110	-.2070	-.2090
135.000	-.2110	-.2060	-.2050
180.000	-.2050	-.2060	-.2080
225.000	-.2020	-.2050	-.2030
270.000	-.2040	-.2090	-.1940

MACH (2) = .906 BETA (5) = 8.350

X/LNP	.250	.500	.750
PHI			
.000	-.2120	-.2240	
90.000	-.2170	-.2210	-.2340
135.000	-.2190	-.2210	-.2250
180.000	-.2180	-.2200	-.2230
225.000	-.2160	-.2190	-.2250

AMES 11-7X7 OA12 OEA UPPER MPS NOZZLE (RBPD14)

SECTION 1 UPPER MPS NOZZLE DEPENDENT VARIABLE CP

MACH 2) = .9 & BETA 5) = 8.35D

X/LNP	.25D	.5D	.75D
27.1222	-.224D	-.222D	-.226D

DATE 18 SEP 75 TABULATED PRESSURE DATA - OA12A (RBPD15) [illegible] MAY 73

AMES 11-7X7 OA12 02A UPPER MPS NOZZLE

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.53[illegible] INCHES
LREF = 39.849[illegible] INCHES YMRP = .[illegible] INCHES
BREF = 39.849[illegible] INCHES ZMRP = .[illegible] INCHES
SCALE = .03[illegible] SCALE

PARAMETRIC DATA

ALPHA = 15.[illegible] RUDDER = -2[illegible]
ELEVON = .[illegible] RUDFLR = .[illegible]

SECTION (1)MPS NOZZLE

DEPENDENT VARIABLE CP

MACH (1) = .6[illegible] BETA (1) = -8.[illegible]

X/LNP	.25[illegible]	.5[illegible]	.75[illegible]
PHI			
.[illegible]	-.243[illegible]	-.23[illegible]	
9[illegible].[illegible]	-.235[illegible]	-.235[illegible]	-.234[illegible]
135.[illegible]	-.239[illegible]	-.231[illegible]	-.234[illegible]
18[illegible].[illegible]	-.233[illegible]	-.236[illegible]	-.232[illegible]
225.[illegible]	-.227[illegible]	-.233[illegible]	-.229[illegible]
27[illegible].[illegible]	-.228[illegible]	-.233[illegible]	-.229[illegible]

MACH (1) = .999 BETA (2) = -3.97[illegible]

X/LNP	.25[illegible]	.5[illegible]	.75[illegible]
PHI			
.[illegible]	-.23[illegible]	-.228[illegible]	
9[illegible].[illegible]	-.229[illegible]	-.226[illegible]	-.227[illegible]
135.[illegible]	-.231[illegible]	-.231[illegible]	-.227[illegible]
18[illegible].[illegible]	-.226[illegible]	-.227[illegible]	-.228[illegible]
225.[illegible]	-.227[illegible]	-.224[illegible]	-.223[illegible]
27[illegible].[illegible]	-.225[illegible]	-.227[illegible]	-.226[illegible]

MACH (1) = .6[illegible] BETA (3) = .10[illegible]

X/LNP	.25[illegible]	.5[illegible]	.75[illegible]
PHI			
.[illegible]	-.248[illegible]	-.24[illegible]	
9[illegible].[illegible]	-.24[illegible]	-.242[illegible]	-.246[illegible]
135.[illegible]	-.241[illegible]	-.24[illegible]	-.244[illegible]
18[illegible].[illegible]	-.24[illegible]	-.241[illegible]	-.247[illegible]
225.[illegible]	-.244[illegible]	-.242[illegible]	-.238[illegible]
27[illegible].[illegible]	-.24[illegible]	-.247[illegible]	-.238[illegible]

MACH (1) = .99[illegible] BETA (4) = 4.18[illegible]

X/LNP	.25[illegible]	.5[illegible]	.75[illegible]
PHI			
.[illegible]	-.241[illegible]	-.232[illegible]	
9[illegible].[illegible]	-.238[illegible]	-.229[illegible]	-.234[illegible]
135.[illegible]	-.238[illegible]	-.229[illegible]	-.234[illegible]
18[illegible].[illegible]	-.236[illegible]	-.231[illegible]	-.234[illegible]
225.[illegible]	-.235[illegible]	-.232[illegible]	-.233[illegible]
27[illegible].[illegible]	-.233[illegible]	-.231[illegible]	-.231[illegible]

MACH (1) = .999 BETA (5) = 8.26[illegible]

X/LNP	.25[illegible]	.5[illegible]	.75[illegible]
PHI			
.[illegible]	-.244[illegible]	-.24[illegible]	
9[illegible].[illegible]	-.245[illegible]	-.245[illegible]	-.238[illegible]
135.[illegible]	-.245[illegible]	-.236[illegible]	-.244[illegible]
18[illegible].[illegible]	-.243[illegible]	-.242[illegible]	-.244[illegible]
225.[illegible]	-.24[illegible]	-.238[illegible]	-.248[illegible]

AMES 11-FT OA12 OEA UPPER MPS NOZZLE (RBFD15)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (5) = 8.26[illegible]

X/LNP	.250	.500	.750
PHI			
270.000	-.238[illegible]	-.244[illegible]	-.238[illegible]

MACH (2) = .901 BETA (1) = -8.12[illegible]

X/LNP	.250	.500	.750
PHI			
.000	-.250[illegible]	-.247[illegible]	
90.000	-.245[illegible]	-.246[illegible]	-.246[illegible]
135.000	-.254[illegible]	-.247[illegible]	-.238[illegible]
180.000	-.242[illegible]	-.242[illegible]	-.234[illegible]
225.000	-.246[illegible]	-.238[illegible]	-.231[illegible]
270.000	-.249[illegible]	-.246[illegible]	-.233[illegible]

MACH (2) = .900 BETA (2) = -4.01[illegible]

X/LNP	.250	.500	.750
PHI			
.000	-.251[illegible]	-.236[illegible]	
90.000	-.245[illegible]	-.235[illegible]	-.233[illegible]
135.000	-.242[illegible]	-.235[illegible]	-.232[illegible]
180.000	-.237[illegible]	-.229[illegible]	-.234[illegible]
225.000	-.238[illegible]	-.232[illegible]	-.227[illegible]
270.000	-.237[illegible]	-.235[illegible]	-.227[illegible]

MACH (2) = .899 BETA (3) = .19[illegible]

X/LNP	.250	.500	.750
PHI			
.000	-.262[illegible]	-.248[illegible]	
90.000	-.259[illegible]	-.248[illegible]	-.239[illegible]
135.000	-.261[illegible]	-.243[illegible]	-.242[illegible]
180.000	-.259[illegible]	-.246[illegible]	-.245[illegible]
225.000	-.254[illegible]	-.247[illegible]	-.239[illegible]
270.000	-.255[illegible]	-.245[illegible]	-.241[illegible]

MACH (2) = .899 BETA (4) = 4.21[illegible]

X/LNP	.250	.500	.750
PHI			
.000	-.245[illegible]	-.239[illegible]	
90.000	-.239[illegible]	-.241[illegible]	-.241[illegible]
135.000	-.242[illegible]	-.244[illegible]	-.242[illegible]
180.000	-.231[illegible]	-.244[illegible]	-.245[illegible]
225.000	-.242[illegible]	-.242[illegible]	-.236[illegible]
270.000	-.241[illegible]	-.246[illegible]	-.245[illegible]

MACH (2) = .898 BETA (5) = 8.34[illegible]

X/LNP	.250	.500	.750
PHI			
.000	-.262[illegible]	-.261[illegible]	
90.000	-.270[illegible]	-.256[illegible]	-.266[illegible]
135.000	-.270[illegible]	-.257[illegible]	-.255[illegible]
180.000	-.258[illegible]	-.263[illegible]	-.258[illegible]
225.000	-.263[illegible]	-.254[illegible]	-.256[illegible]

AMES 11-7X7 OA12 O2A UPPER MPS NOZZLE (RBPD15)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .898 BETA (5) = 8.34D

X/LNP	.25D	.50D	.75D
PHI			
27D.0DD	-.26DD	-.259D	-.25DD

DATE 10 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPD16) (01 MAY 73)

AMES 11-7X7 OA12 OEA UPPER MPS NOZZLE

REFERENCE DATA

SREF = 2.421 SQ.FT. XMRP = 28.530 INCHES
LREF = 39.849 INCHES YMRP = .000 INCHES
BREF = 39.849 INCHES ZMRP = .000 INCHES
SCALE = .030 SCALE

PARAMETRIC DATA

ALPHA = 20.000 RUDDER = -20.000
ELEVON = .000 RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -7.990

X/LNP	.250	.500	.750
PHI			
.000	-.274	-.270	
90.000	-.263	-.265	-.263
135.000	-.270	-.268	-.269
180.000	-.270	-.266	-.270
225.000	-.263	-.264	-.266
270.000	-.268	-.268	-.261

MACH (1) = .598 BETA (2) = -3.990

X/LNP	.250	.500	.750
PHI			
.000	-.276	-.266	
90.000	-.265	-.268	-.265
135.000	-.267	-.265	-.269
180.000	-.270	-.270	-.269
225.000	-.268	-.262	-.264
270.000	-.268	-.269	-.262

MACH (1) = .601 BETA (3) = .100

X/LNP	.250	.500	.750
PHI			
.000	-.294	-.295	
90.000	-.291	-.292	-.294
135.000	-.292	-.294	-.294
180.000	-.291	-.289	-.293
225.000	-.291	-.290	-.292
270.000	-.293	-.289	-.293

MACH (1) = .597 BETA (4) = 4.200

X/LNP	.250	.500	.750
PHI			
.000	-.282	-.283	
90.000	-.287	-.291	-.287
135.000	-.284	-.286	-.275
180.000	-.286	-.277	-.282
225.000	-.291	-.284	-.287
270.000	-.283	-.274	-.278

MACH (1) = .604 BETA (5) = 8.320

X/LNP	.250	.500	.750
PHI			
.000	-.279	-.279	
90.000	-.281	-.282	-.282
135.000	-.284	-.285	-.281
180.000	-.287	-.284	-.279
225.000	-.282	-.281	-.291

DATE 10 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPD16)

AMES 11-707 OA12 O2A UPPER MPS NOZZLE

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .604 BETA (5) = 8.320

X/LNP	.250	.500	.750
PHI			
270.000	-.2810	-.2840	-.2910

MACH (2) = .698 BETA (1) = -8.060

X/LNP	.250	.500	.750
PHI			
.000	-.2840	-.2790	
90.000	-.2840	-.2810	-.2750
135.000	-.2830	-.2820	-.2780
180.000	-.2830	-.2840	-.2850
225.000	-.2810	-.2840	-.2820
270.000	-.2810	-.2840	-.2820

MACH (2) = .697 BETA (2) = -3.980

X/LNP	.250	.500	.750
PHI			
.000	-.2880	-.2850	
90.000	-.2860	-.2870	-.2810
135.000	-.2890	-.2860	-.2880
180.000	-.2800	-.2800	-.2900
225.000	-.2850	-.2790	-.2820
270.000	-.2880	-.2870	-.2810

MACH (2) = .697 BETA (3) = .090

X/LNP	.250	.500	.750
PHI			
.000	-.3110	-.3160	
90.000	-.3200	-.3200	-.3160
135.000	-.3170	-.3180	-.3110
180.000	-.3140	-.3150	-.3080
225.000	-.3190	-.3120	-.3080
270.000	-.3120	-.3240	-.3110

MACH (2) = .698 BETA (4) = 4.240

X/LNP	.250	.500	.750
PHI			
.000	-.3000	-.3060	
90.000	-.3050	-.3000	-.3030
135.000	-.3090	-.3020	-.3020
180.000	-.3060	-.2960	-.3050
225.000	-.3110	-.3020	-.3010
270.000	-.3070	-.3080	-.2960

MACH (2) = .699 BETA (5) = 8.370

X/LNP	.250	.500	.750
PHI			
.000	-.3020	-.3080	
90.000	-.3150	-.3070	-.3030
135.000	-.3170	-.3100	-.3040
180.000	-.3110	-.3030	-.3050
225.000	-.3210	-.3010	-.3150

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPD16)

AMES 11-7D7 OA12 O2A UPPER MPS NOZZLE

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .899 BETA (5) = 8.370

X/LNP	.250	.500	.750
PHI			
270.000	-.3220	-.3050	-.3170

AMES 11-7ft OA12 02A UPPER MPS NOZZLE (RBPD17) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0390 SCALE

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000
ELEVON = 10.000 RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .597 BETA (1) =-10.000

X/LNP	.250	.500	.750
PHI			
.000	-.2030	-.2010	
90.000	-.2010	-.2000	-.2010
135.000	-.2040	-.2030	-.2040
180.000	-.2030	-.2010	-.2060
225.000	-.2020	-.1990	-.2010
270.000	-.2020	-.2040	-.2020

MACH (1) = .598 BETA (2) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1550	-.1530	
90.000	-.1530	-.1510	-.1550
135.000	-.1570	-.1550	-.1550
180.000	-.1520	-.1560	-.1570
225.000	-.1530	-.1530	-.1570
270.000	-.1530	-.1550	-.1570

MACH (1) = .600 BETA (3) = 10.370

X/LNP	.250	.500	.750
PHI			
.000	-.1900	-.1870	
90.000	-.1870	-.1860	-.1870
135.000	-.1890	-.1880	-.1860
180.000	-.1880	-.1870	-.1880
225.000	-.1870	-.1860	-.1800
270.000	-.1860	-.1870	-.1860

MACH (2) = .901 BETA (1) =-10.120

X/LNP	.250	.500	.750
PHI			
.000	-.2490	-.2340	
90.000	-.2360	-.2340	-.2380
135.000	-.2390	-.2350	-.2370
180.000	-.2380	-.2340	-.2370
225.000	-.2350	-.2310	-.2350
270.000	-.2360	-.2320	-.2340

MACH (2) = .899 BETA (2) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1990	-.1950	
90.000	-.1970	-.1930	-.1940
135.000	-.1990	-.1990	-.1930
180.000	-.1940	-.1960	-.2000
225.000	-.1920	-.1970	-.1950

DATE 18 SEP 75 TABULATED PRESSURE DATA - OA12A (RBPD17)

AMES 11-7X7 OA12 O2A UPPER MPS NOZZLE

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .899 BETA (2) = .080

X/LNP	.250	.500	.750
PHI			
270.000	-.1920	-.1970	-.2000

MACH (2) = .903 BETA (3) = 10.490

X/LNP	.250	.500	.750
PHI			
.000	-.2200	-.2160	
90.000	-.2190	-.2160	-.2180
135.000	-.2260	-.2260	-.2210
180.000	-.2200	-.2220	-.2220
225.000	-.2200	-.2220	-.2150
270.000	-.2190	-.2250	-.2230

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBFD18) (01 MAY 73)

AMES 11-7U7 OA12 02A UPPER MPS NOZZLE

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000
ELEVON = 10.000 RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) =-10.070

X/LNP	.250	.500	.750
PHI			
.000	-.2110	-.2120	
90.000	-.2100	-.2100	-.2110
135.000	-.2120	-.2100	-.2130
180.000	-.2070	-.2110	-.2140
225.000	-.2070	-.2100	-.2120
270.000	-.2090	-.2120	-.2130

MACH (1) = .596 BETA (2) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1870	-.1840	
90.000	-.1850	-.1830	-.1850
135.000	-.1890	-.1850	-.1850
180.000	-.1860	-.1850	-.1860
225.000	-.1850	-.1850	-.1830
270.000	-.1850	-.1850	-.1860

MACH (1) = .598 BETA (3) = 10.300

X/LNP	.250	.500	.750
PHI			
.000	-.2210	-.2180	
90.000	-.2200	-.2180	-.2180
135.000	-.2180	-.2180	-.2170
180.000	-.2180	-.2180	-.2170
225.000	-.2150	-.2160	-.2150
270.000	-.2150	-.2180	-.2120

MACH (2) = .899 BETA (1) =-10.190

X/LNP	.250	.500	.750
PHI			
.000	-.2280	-.2250	
90.000	-.2250	-.2260	-.2240
135.000	-.2290	-.2310	-.2270
180.000	-.2250	-.2320	-.2310
225.000	-.2290	-.2270	-.2300
270.000	-.2270	-.2320	-.2290

MACH (2) = .901 BETA (2) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1850	-.1930	
90.000	-.1870	-.1890	-.1940
135.000	-.1900	-.1880	-.1960
180.000	-.1880	-.1900	-.1970
225.000	-.1900	-.1930	-.1960

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPD18)

AMES 11-7U7 OA12 OBA UPPER MPS NOZZLE

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .891 BETA (2) = .080

X/LNP	.250	.500	.750
PHI			
270.000	-.1910	-.1940	-.1930

MACH (2) = .895 BETA (3) = 10.420

X/LNP	.250	.500	.750
PHI			
.000	-.2290	-.2130	
90.000	-.2230	-.2200	-.2220
135.000	-.2190	-.2250	-.2180
180.000	-.2170	-.2220	-.2170
225.000	-.2220	-.2180	-.2190
270.000	-.2140	-.2230	-.2200

AMES 11-707 OA12 02A UPPER MPS NOZZLE (RBPD19) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 20.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 10.000 RUDDER = .000
ELEVON = 10.000 RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) =-10.110

X/LNP	.250	.500	.750
PHI			
.000	-.2280	-.2290	
90.000	-.2260	-.2270	-.2300
135.000	-.2310	-.2330	-.2260
180.000	-.2280	-.2270	-.2300
225.000	-.2260	-.2250	-.2300
270.000	-.2280	-.2300	-.2290

MACH (1) = .597 BETA (2) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1920	-.1890	
90.000	-.1910	-.1880	-.1880
135.000	-.1900	-.1880	-.1880
180.000	-.1890	-.1880	-.1880
225.000	-.1890	-.1880	-.1880
270.000	-.1880	-.1870	-.1880

MACH (1) = .599 BETA (3) = 10.270

X/LNP	.250	.500	.750
PHI			
.000	-.2340	-.2330	
90.000	-.2290	-.2360	-.2360
135.000	-.2340	-.2300	-.2340
180.000	-.2330	-.2290	-.2390
225.000	-.2300	-.2300	-.2320
270.000	-.2330	-.2380	-.2340

MACH (2) = .904 BETA (1) =-10.210

X/LNP	.250	.500	.750
PHI			
.000	-.2520	-.2550	
90.000	-.2460	-.2560	-.2550
135.000	-.2520	-.2540	-.2550
180.000	-.2450	-.2570	-.2580
225.000	-.2540	-.2550	-.2590
270.000	-.2580	-.2600	-.2560

MACH (2) = .898 BETA (2) = .090

X/LNP	.250	.500	.750
PHI			
.000	-.2360	-.2260	
90.000	-.2340	-.2230	-.2210
135.000	-.2410	-.2370	-.2190
180.000	-.2300	-.2330	-.2280
225.000	-.2260	-.2270	-.2260

AMES 11-7U7 OA12 O2A UPPER MPS NOZZLE (R[illegible]D19)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .898 BETA (2) = .U9U

X/LNP	.250	.500	.750
PHI			
270.000	-.2310	-.2290	-.2300

MACH (2) = .897 BETA (3) = 10.39U

X/LNP	.250	.500	.750
PHI			
.000	-.2420	-.2420	
90.000	-.2390	-.2430	-.2390
135.000	-.2420	-.2420	-.2360
180.000	-.2440	-.2350	-.2440
225.000	-.2400	-.2400	-.2410
270.000	-.2380	-.2450	-.2450

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPD20) (01 MAY 73)

AMES 11-7D7 OA12 OEA UPPER MPS NOZZLE

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 15.000 RUDDER = .000
ELEVON = 10.000 RUDFLR = .000

SECTION (1)MPS NOZZLE

DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) =-10.080

X/LNP	.250	.500	.750
PHI			
.000	-.2550	-.2500	
90.000	-.2520	-.2500	-.2490
135.000	-.2520	-.2500	-.2490
180.000	-.2520	-.2500	-.2480
225.000	-.2500	-.2500	-.2490
270.000	-.2510	-.2510	-.2480

MACH (1) = .599 BETA (2) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.2390	-.2360	
90.000	-.2370	-.2370	-.2360
135.000	-.2370	-.2350	-.2350
180.000	-.2370	-.2350	-.2360
225.000	-.2370	-.2350	-.2350
270.000	-.2360	-.2360	-.2360

MACH (1) = .599 BETA (3) = 10.290

X/LNP	.250	.500	.750
PHI			
.000	-.2610	-.2590	
90.000	-.2590	-.2520	-.2570
135.000	-.2530	-.2570	-.2530
180.000	-.2550	-.2590	-.2620
225.000	-.2530	-.2590	-.2580
270.000	-.2530	-.2600	-.2610

MACH (2) = .902 BETA (1) =-10.190

X/LNP	.250	.500	.750
PHI			
.000	-.2760	-.2740	
90.000	-.2730	-.2730	-.2750
135.000	-.2740	-.2790	-.2750
180.000	-.2730	-.2770	-.2820
225.000	-.2740	-.2750	-.2750
270.000	-.2760	-.2720	-.2730

MACH (2) = .900 BETA (2) = .070

X/LNP	.250	.500	.750
PHI			
.000	-.2520	-.2510	
90.000	-.2510	-.2560	-.2530
135.000	-.2540	-.2520	-.2570
180.000	-.2540	-.2520	-.2670
225.000	-.2530	-.2590	-.2640

AMES 11-7X7 OA12 02A UPPER MPS NOZZLE (RBPD2D)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .900 BETA (2) = .070

X/LNP	.250	.500	.750
PHI			
270.000	-.2500	-.2620	-.2660

MACH (2) = .902 BETA (3) = 10.380

X/LNP	.250	.500	.750
PHI			
.000	-.2740	-.2630	
90.000	-.2660	-.2700	-.2640
135.000	-.2700	-.2820	-.2720
180.000	-.2560	-.2730	-.2710
225.000	-.2630	-.2690	-.2700
270.000	-.2640	-.2690	-.2700

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7ft OA12 02A UPPER MPS NOZZLE (RBPD21) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 20.000 RUDDER = .000
ELEVON = 10.000 RUDFLR = .000

SECTION (1)MPS NOZZLE

DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) =-10.030

X/LNP	.250	.500	.750
PHI			
.000	-.3120	-.3150	
90.000	-.3100	-.3160	-.3180
135.000	-.3180	-.3180	-.3160
180.000	-.3210	-.3230	-.3120
225.000	-.3180	-.3140	-.3150
270.000	-.3160	-.3110	-.3120

MACH (1) = .601 BETA (2) = .070

X/LNP	.250	.500	.750
PHI			
.000	-.2950	-.2890	
90.000	-.2880	-.2860	-.2900
135.000	-.2920	-.2900	-.2880
180.000	-.2880	-.2850	-.2880
225.000	-.2890	-.2890	-.2830
270.000	-.2910	-.2870	-.2850

MACH (1) = .598 BETA (3) = 10.370

X/LNP	.250	.500	.750
PHI			
.000	-.3110	-.3060	
90.000	-.3040	-.3030	-.3060
135.000	-.3210	-.3080	-.3060
180.000	-.3110	-.3060	-.2990
225.000	-.3140	-.3160	-.3020
270.000	-.3080	-.3070	-.3030

MACH (2) = .902 BETA (1) =-10.100

X/LNP	.250	.500	.750
PHI			
.000	-.3520	-.3430	
90.000	-.3490	-.3470	-.3430
135.000	-.3520	-.3440	-.3460
180.000	-.3470	-.3510	-.3520
225.000	-.3500	-.3510	-.3490
270.000	-.3500	-.3510	-.3470

MACH (2) = .894 BETA (2) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.3350	-.3420	
90.000	-.3380	-.3440	-.3340
135.000	-.3450	-.3350	-.3320
180.000	-.3340	-.3390	-.3390
225.000	-.3220	-.3310	-.3320

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPD21)

AMES 11-7ft OA12 OEA UPPER MPS NOZZLE

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .894 BETA (2) = .58D

X/LNP	.25D	.50D	.75D
PHI			
270.00D	-.331D	-.341D	-.345D

MACH (2) = .90I BETA (3) = 10.42D

X/LNP	.25D	.50D	.75D
PHI			
.00D	-.349D	-.336D	
90.00D	-.339D	-.344D	-.349D
135.00D	-.342D	-.353D	-.346D
180.00D	-.347D	-.351D	-.354D
225.00D	-.353D	-.352D	-.350D
270.00D	-.346D	-.353D	-.347D

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 O2A UPPER MPS NOZZLE (RBPD22) (01 MAY 73)

REFERENCE DATA

SREF = 2.421U SQ.FT. XMRP = 28.53U6 INCHES
LREF = 39.849U INCHES YMRP = .UUUU INCHES
BREF = 39.849U INCHES ZMRP = .UUUU INCHES
SCALE = .U3U6 SCALE

PARAMETRIC DATA

ALPHA = .UUU RUDDER = .UUU
ELEVON = -1U.UUU RUDFLR = .UUU

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -7.97U

X/LNP	.25U	.5UU	.75U
PHI			
.UUU	-.147U	-.143U	
9U.UUU	-.146U	-.144U	-.141U
135.UUU	-.148U	-.142U	-.146U
18U.UUU	-.141U	-.141U	-.146U
225.UUU	-.145U	-.142U	-.143U
27U.UUU	-.143U	-.146U	-.143U

MACH (1) = .595 BETA (2) = -3.84U

X/LNP	.25U	.5UU	.75U
PHI			
.UUU	-.137U	-.134U	
9U.UUU	-.136U	-.129U	-.131U
135.UUU	-.136U	-.132U	-.133U
18U.UUU	-.131U	-.131U	-.13UU
225.UUU	-.131U	-.128U	-.129U
27U.UUU	-.131U	-.135U	-.133U

MACH (1) = .597 BETA (3) = .08U

X/LNP	.25U	.5UU	.75U
PHI			
.UUU	-.132U	-.129U	
9U.UUU	-.127U	-.129U	-.129U
135.UUU	-.134U	-.129U	-.127U
18U.UUU	-.128U	-.132U	-.132U
225.UUU	-.128U	-.129U	-.129U
27U.UUU	-.128U	-.129U	-.127U

MACH (1) = .596 BETA (4) = 4.2UU

X/LNP	.25U	.5UU	.75U
PHI			
.UUU	-.134U	-.127U	
9U.UUU	-.13UU	-.128U	-.129U
135.UUU	-.137U	-.132U	-.124U
18U.UUU	-.129U	-.13UU	-.13UU
225.UUU	-.131U	-.127U	-.126U
27U.UUU	-.131U	-.128U	-.126U

MACH (1) = .597 BETA (5) = 8.3UU

X/LNP	.25U	.5UU	.75U
PHI			
.UUU	-.143U	-.134U	
9U.UUU	-.135U	-.131U	-.133U
135.UUU	-.142U	-.14UU	-.137U
18U.UUU	-.14UU	-.138U	-.143U
225.UUU	-.136U	-.135U	-.136U

AMES 11-707 OA12 02A UPPER MPS NOZZLE (RBFD22)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .597 BETA (5) = 8.300

X/LNP	.250	.500	.750
PHI			
270.000	-.1380	-.1390	-.1380

MACH (2) = .904 BETA (1) = -8.090

X/LNP	.250	.500	.750
PHI			
.000	-.1820	-.1790	
90.000	-.1840	-.1750	-.1810
135.000	-.1840	-.1770	-.1790
180.000	-.1750	-.1780	-.1810
225.000	-.1780	-.1750	-.1770
270.000	-.1790	-.1810	-.1780

MACH (2) = .902 BETA (2) = -4.040

X/LNP	.250	.500	.750
PHI			
.000	-.1640	-.1590	
90.000	-.1610	-.1640	-.1620
135.000	-.1660	-.1660	-.1640
180.000	-.1610	-.1620	-.1630
225.000	-.1610	-.1620	-.1610
270.000	-.1550	-.1620	-.1660

MACH (2) = .898 BETA (3) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1530	-.1520	
90.000	-.1530	-.1470	-.1520
135.000	-.1510	-.1460	-.1500
180.000	-.1500	-.1490	-.1480
225.000	-.1510	-.1500	-.1440
270.000	-.1490	-.1510	-.1490

MACH (2) = .899 BETA (4) = 4.250

X/LNP	.250	.500	.750
PHI			
.000	-.1670	-.1540	
90.000	-.1630	-.1560	-.1450
135.000	-.1590	-.1590	-.1450
180.000	-.1560	-.1540	-.1490
225.000	-.1590	-.1480	-.1400
270.000	-.1560	-.1520	-.1450

MACH (2) = .900 BETA (5) = 8.410

X/LNP	.250	.500	.750
PHI			
.000	-.1690	-.1630	
90.000	-.1620	-.1610	-.1590
135.000	-.1650	-.1590	-.1580
180.000	-.1620	-.1560	-.1690
225.000	-.1540	-.1550	-.1620

AMES 11-707 OA12 OEA UPPER MPS NOZZLE (RBPD22)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .900 BETA (5) = 8.410

X/LNP	.250	.500	.750
PHI			
270.000	-.1570	-.1640	-.1600

AMES 11-7X7 OA12 OEA UPPER MPS NOZZLE (RBPD23) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000
ELEVON = -10.000 RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -8.030

X/LNP	.250	.500	.750
PHI			
.000	-.1610	-.1530	
90.000	-.1570	-.1520	-.1560
135.000	-.1590	-.1510	-.1560
180.000	-.1530	-.1540	-.1550
225.000	-.1530	-.1510	-.1540
270.000	-.1530	-.1510	-.1550

MACH (1) = .598 BETA (2) = -3.970

X/LNP	.250	.500	.750
PHI			
.000	-.1420	-.1380	
90.000	-.1390	-.1380	-.1390
135.000	-.1430	-.1370	-.1360
180.000	-.1360	-.1410	-.1420
225.000	-.1380	-.1370	-.1390
270.000	-.1390	-.1380	-.1380

MACH (1) = .599 BETA (3) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1410	-.1360	
90.000	-.1340	-.1330	-.1350
135.000	-.1350	-.1340	-.1340
180.000	-.1360	-.1360	-.1350
225.000	-.1320	-.1310	-.1330
270.000	-.1320	-.1340	-.1290

MACH (1) = .598 BETA (4) = 4.170

X/LNP	.250	.500	.750
PHI			
.000	-.1350	-.1310	
90.000	-.1370	-.1340	-.1360
135.000	-.1350	-.1350	-.1290
180.000	-.1360	-.1350	-.1320
225.000	-.1330	-.1370	-.1350
270.000	-.1320	-.1390	-.1310

MACH (1) = .596 BETA (5) = 8.250

X/LNP	.250	.500	.750
PHI			
.000	-.1510	-.1460	
90.000	-.1460	-.1490	-.1510
135.000	-.1520	-.1500	-.1440
180.000	-.1470	-.1490	-.1450
225.000	-.1480	-.1450	-.1480

AMES 11-7U7 OA12 O2A UPPER MPS NOZZLE (RBPD23)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .596 BETA (5) = 8.250

X/LNP	.250	.500	.750
PHI			
270.000	-.1450	-.1500	-.1460

MACH (2) = .903 BETA (1) = -8.140

X/LNP	.250	.500	.750
PHI			
.000	-.1860	-.1820	
90.000	-.1850	-.1830	-.1840
135.000	-.1840	-.1820	-.1840
180.000	-.1870	-.1860	-.1890
225.000	-.1900	-.1840	-.1840
270.000	-.1840	-.1880	-.1810

MACH (2) = .902 BETA (2) = -4.030

X/LNP	.250	.500	.750
PHI			
.000	-.1650	-.1600	
90.000	-.1590	-.1630	-.1660
135.000	-.1660	-.1660	-.1670
180.000	-.1650	-.1680	-.1670
225.000	-.1640	-.1610	-.1610
270.000	-.1630	-.1660	-.1670

MACH (2) = .901 BETA (3) = .090

X/LNP	.250	.500	.750
PHI			
.000	-.1560	-.1510	
90.000	-.1520	-.1540	-.1500
135.000	-.1610	-.1520	-.1550
180.000	-.1560	-.1510	-.1550
225.000	-.1540	-.1540	-.1560
270.000	-.1540	-.1520	-.1580

MACH (2) = .903 BETA (4) = 4.220

X/LNP	.250	.500	.750
PHI			
.000	-.1600	-.1540	
90.000	-.1560	-.1550	-.1560
135.000	-.1580	-.1600	-.1530
180.000	-.1520	-.1560	-.1590
225.000	-.1560	-.1570	-.1590
270.000	-.1520	-.1580	-.1610

MACH (2) = .901 BETA (5) = 8.350

X/LNP	.250	.500	.750
PHI			
.000	-.1740	-.1660	
90.000	-.1670	-.1610	-.1670
135.000	-.1690	-.1670	-.1700
180.000	-.1670	-.1650	-.1700
225.000	-.1660	-.1660	-.1640

AMES 11-7X7 OA12 OEA UPPER MPS NOZZLE (RBPD23)

SECTION (1)MPS NOZZLE

DEPENDENT VARIABLE CP

MACH (2) = .901 BETA (5) = 8.350

X/LNP	.250	.500	.750
PHI			
270.000	-.1700	-.1690	-.1670

AMES 11-7b7 OA12 O2A UPPER MPS NOZZLE (RBPD24) (01 MAY 73)

REFERENCE DATA

SREF = 2.421b SQ.FT. XMRP = 28.53b0 INCHES
LREF = 39.849b INCHES YMRP = .0000 INCHES
BREF = 39.849b INCHES ZMRP = .0000 INCHES
SCALE = .03b0 SCALE

PARAMETRIC DATA

ALPHA = 1b.000 RUDDER = .000
ELEVON = -1b.000 RUDFLR = .000

SECTION (1)MPS NOZZLE

DEPENDENT VARIABLE CP

MACH (1) = .597 BETA (1) = -8.060

X/LNP	.250	.500	.750
PHI			
.000	-.1740	-.1750	
90.000	-.1770	-.1710	-.1780
135.000	-.1730	-.1760	-.1770
180.000	-.1740	-.1690	-.1750
225.000	-.1680	-.1710	-.1750
270.000	-.1760	-.1760	-.1750

MACH (1) = .599 BETA (2) = -3.990

X/LNP	.250	.500	.750
PHI			
.000	-.1610	-.1590	
90.000	-.1520	-.1570	-.1580
135.000	-.1600	-.1610	-.1540
180.000	-.1550	-.1590	-.1570
225.000	-.1560	-.1530	-.1630
270.000	-.1560	-.1590	-.1600

MACH (1) = .600 BETA (3) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1550	-.1440	
90.000	-.1530	-.1480	-.1550
135.000	-.1490	-.1480	-.1490
180.000	-.1480	-.1510	-.1490
225.000	-.1500	-.1490	-.1490
270.000	-.1510	-.1490	-.1490

MACH (1) = .596 BETA (4) = 4.150

X/LNP	.250	.500	.750
PHI			
.000	-.1530	-.1540	
90.000	-.1520	-.1500	-.1500
135.000	-.1540	-.1530	-.1440
180.000	-.1510	-.1530	-.1520
225.000	-.1500	-.1490	-.1510
270.000	-.1510	-.1460	-.1530

MACH (1) = .599 BETA (5) = 8.230

X/LNP	.250	.500	.750
PHI			
.000	-.1680	-.1660	
90.000	-.1690	-.1640	-.1690
135.000	-.1650	-.1650	-.1630
180.000	-.1620	-.1640	-.1680
225.000	-.1640	-.1620	-.1700

AMES 11-7U7 OA12 O2A UPPER MPS NOZZLE (RBFD24)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (5) = 8.23U

X/LNP	.25U	.5UU	.75U
PHI			
27U.UUU	-.169U	-.166U	-.165U

MACH (2) = .9UU BETA (1) = -8.15U

X/LNP	.25U	.5UU	.75U
PHI			
.UUU	-.213U	-.204U	
9U.UUU	-.211U	-.205U	-.199U
135.UUU	-.207U	-.204U	-.195U
18U.UUU	-.2UUU	-.201U	-.193U
225.UUU	-.204U	-.201U	-.195U
27U.UUU	-.202U	-.207U	-.192U

MACH (2) = .9UU BETA (2) = -4.03U

X/LNP	.25U	.5UU	.75U
PHI			
.UUU	-.189U	-.179U	
9U.UUU	-.185U	-.178U	-.175U
135.UUU	-.187U	-.18UU	-.174U
18U.UUU	-.181U	-.174U	-.175U
225.UUU	-.181U	-.176U	-.173U
27U.UUU	-.182U	-.179U	-.173U

MACH (2) = .899 BETA (3) = .08U

X/LNP	.25U	.5UU	.75U
PHI			
.UUU	-.187U	-.171U	
9U.UUU	-.18UU	-.174U	-.164U
135.UUU	-.181U	-.17UU	-.165U
18U.UUU	-.171U	-.169U	-.167U
225.UUU	-.177U	-.163U	-.162U
27U.UUU	-.173U	-.167U	-.164U

MACH (2) = .902 BETA (4) = 4.19U

X/LNP	.25U	.5UU	.75U
PHI			
.UUU	-.177U	-.175U	
9U.UUU	-.176U	-.174U	-.172U
135.UUU	-.177U	-.177U	-.17UU
18U.UUU	-.176U	-.177U	-.172U
225.UUU	-.176U	-.173U	-.167U
27U.UUU	-.175U	-.18UU	-.168U

MACH (2) = .9UU BETA (5) = 3.33U

X/LNP	.25U	.5UU	.75U
PHI			
.UUU	-.184U	-.182U	
9U.UUU	-.181U	-.181U	-.18UU
135.UUU	-.182U	-.18UU	-.18UU
18U.UUU	-.178U	-.179U	-.189U
225.UUU	-.175U	-.179U	-.184U

AMES 11-7?7 OA12 O2A UPPER MPS NOZZLE (RBFD24)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .9?? BETA (5) = 8.33?

X/LNP	.250	.500	.750
PHI			
27?.??	-.177?	-.179?	-.188?

AMES 11-FT OA12 02A UPPER MPS NOZZLE (RBPD25) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 15.000 RUDDER = .000
ELEVON = -10.000 RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -8.040

X/LNP	.250	.500	.750
PHI			
.000	-.2030	-.2030	
90.000	-.2030	-.2070	-.2070
135.000	-.2050	-.2060	-.2090
180.000	-.2060	-.2000	-.2030
225.000	-.2040	-.2[illegible]	-.1970
270.000	-.2000	-.2060	-.2030

MACH (1) = .598 BETA (2) = -3.990

X/LNP	.250	.500	.750
PHI			
.000	-.1920	-.1950	
90.000	-.1880	-.1900	-.1870
135.000	-.1900	-.1920	-.1900
180.000	-.1900	-.1920	-.1920
225.000	-.1880	-.1910	-.1870
270.000	-.1910	-.1940	-.1860

MACH (1) = .597 BETA (3) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1920	-.1890	
90.000	-.1880	-.1870	-.1850
135.000	-.1920	-.1900	-.1840
180.000	-.1890	-.1850	-.1900
225.000	-.1880	-.1860	-.1870
270.000	-.1880	-.1840	-.1860

MACH (1) = .601 BETA (4) = 4.160

X/LNP	.250	.500	.750
PHI			
.000	-.1920	-.1920	
90.000	-.1910	-.1890	-.1920
135.000	-.1950	-.1910	-.1870
180.000	-.1900	-.1930	-.1840
225.000	-.1880	-.1880	-.1880
270.000	-.1880	-.1890	-.1900

MACH (1) = .601 BETA (5) = 8.250

X/LNP	.250	.500	.750
PHI			
.000	-.2050	-.2000	
90.000	-.2040	-.2050	-.2040
135.000	-.2030	-.2030	-.2100
180.000	-.2050	-.2050	-.2100
225.000	-.2050	-.2040	-.2050

AMES 11-7X7 OA12 O2A UPPER MPS NOZZLE (RBPD29)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .601 BETA (5) = 8.250

X/LNP	.250	.500	.750
PHI			
270.000	-.2050	-.2030	-.2100

MACH (2) = .902 BETA (1) = -8.130

X/LNP	.250	.500	.750
PHI			
.000	-.2240	-.2210	
90.000	-.2230	-.2210	-.2240
135.000	-.2190	-.2260	-.2240
180.000	-.2170	-.2250	-.2260
225.000	-.2140	-.2230	-.2250
270.000	-.2230	-.2250	-.2240

MACH (2) = .901 BETA (2) = -4.020

X/LNP	.250	.500	.750
PHI			
.000	-.2030	-.2040	
90.000	-.2010	-.2080	-.2090
135.000	-.2060	-.2090	-.2060
180.000	-.2050	-.2100	-.2060
225.000	-.2050	-.2020	-.2030
270.000	-.2030	-.2060	-.2090

MACH (2) = .902 BETA (3) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.2030	-.2040	
90.000	-.2010	-.1960	-.2040
135.000	-.2070	-.2030	-.2030
180.000	-.2020	-.2040	-.2060
225.000	-.2000	-.2000	-.2040
270.000	-.1960	-.2020	-.2030

MACH (2) = .898 BETA (4) = 4.190

X/LNP	.250	.500	.750
PHI			
.000	-.1960	-.1940	
90.000	-.1970	-.1980	-.2000
135.000	-.1930	-.2040	-.2010
180.000	-.1940	-.2040	-.2020
225.000	-.2030	-.2040	-.2030
270.000	-.1960	-.2000	-.2020

MACH (2) = .899 BETA (5) = 8.330

X/LNP	.250	.500	.750
PHI			
.000	-.2120	-.2170	
90.000	-.2190	-.2130	-.2090
135.000	-.2180	-.2130	-.2120
180.000	-.2040	-.2100	-.2130
225.000	-.2080	-.2090	-.2080

AMES 11-7ft OA12 OEA UPPER MPS NOZZLE (RBFD25)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .899 BETA (5) = 8.330

X/LNP	.250	.500	.750
PHI			
275.000	-.2145	-.2080	-.2110

AMES 11-7X7 OA12 02A UPPER MPS NOZZLE (RBPD26) (01 MAY 73)

REFERENCE DATA

SREF = 2.4219 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 20.000 RUDDER = .000
ELEVON = -10.000 RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .597 BETA (1) = -7.980

X/LNP	.250	.500	.750
PHI			
.000	-.2430	-.2380	
90.000	-.2390	-.2400	-.2360
135.000	-.2450	-.2400	-.2430
180.000	-.2390	-.2360	-.2440
225.000	-.2330	-.2310	-.2400
270.000	-.2340	-.2380	-.2420

MACH (1) = .598 BETA (2) = -3.960

X/LNP	.250	.500	.750
PHI			
.000	-.2320	-.2310	
90.000	-.2340	-.2300	-.2330
135.000	-.2260	-.2240	-.2300
180.000	-.2240	-.2320	-.2310
225.000	-.2290	-.2310	-.2330
270.000	-.2300	-.2330	-.2340

MACH (1) = .600 BETA (3) = .070

X/LNP	.250	.500	.750
PHI			
.000	-.2410	-.2380	
90.000	-.2320	-.2380	-.2370
135.000	-.2380	-.2350	-.2370
180.000	-.2340	-.2350	-.2340
225.000	-.2310	-.2400	-.2340
270.000	-.2360	-.2380	-.2380

MACH (1) = .598 BETA (4) = 4.190

X/LNP	.250	.500	.750
PHI			
.000	-.2360	-.2350	
90.000	-.2320	-.2220	-.2240
135.000	-.2330	-.2330	-.2270
180.000	-.2300	-.2300	-.2280
225.000	-.2260	-.2280	-.2330
270.000	-.2310	-.2330	-.2310

MACH (1) = .599 BETA (5) = 8.300

X/LNP	.250	.500	.750
PHI			
.000	-.2290	-.2370	
90.000	-.2360	-.2320	-.2330
135.000	-.2360	-.2330	-.2290
180.000	-.2330	-.2290	-.2310
225.000	-.2270	-.2400	-.2350

AMES 11-7X7 OA12 O2A UPPER MPS NOZZLE (RBFD26)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (5) = 8.30D

X/LNP	.25D	.50D	.75D
PHI			
270.0D0	-.227D	-.232D	-.239D

MACH (2) = .903 BETA (1) = -8.07D

X/LNP	.25D	.50D	.75D
PHI			
.0D0	-.277D	-.268D	
90.0D0	-.272D	-.268D	-.271D
135.0D0	-.272D	-.273D	-.275D
180.0D0	-.265D	-.275D	-.279D
225.0D0	-.272D	-.274D	-.277D
270.0D0	-.272D	-.273D	-.272D

MACH (2) = .901 BETA (2) = -3.99D

X/LNP	.25D	.50D	.75D
PHI			
.0D0	-.268D	-.264D	
90.0D0	-.269D	-.266D	-.268D
135.0D0	-.267D	-.275D	-.267D
180.0D0	-.272D	-.272D	-.267D
225.0D0	-.269D	-.270D	-.267D
270.0D0	-.264D	-.269D	-.261D

MACH (2) = .899 BETA (3) = .08D

X/LNP	.25D	.50D	.75D
PHI			
.0D0	-.276D	-.271D	
90.0D0	-.269D	-.264D	-.262D
135.0D0	-.268D	-.259D	-.257D
180.0D0	-.265D	-.256D	-.262D
225.0D0	-.266D	-.256D	-.257D
270.0D0	-.263D	-.262D	-.261D

MACH (2) = .898 BETA (4) = 4.23D

X/LNP	.25D	.50D	.75D
PHI			
.0D0	-.272D	-.267D	
90.0D0	-.267D	-.264D	-.261D
135.0D0	-.266D	-.262D	-.261D
180.0D0	-.256D	-.259D	-.259D
225.0D0	-.262D	-.261D	-.262D
270.0D0	-.262D	-.262D	-.262D

MACH (2) = .904 BETA (5) = 8.36D

X/LNP	.25D	.50D	.75D
PHI			
.0D0	-.267D	-.267D	
90.0D0	-.267D	-.267D	-.265D
135.0D0	-.273D	-.274D	-.266D
180.0D0	-.266D	-.271D	-.269D
225.0D0	-.264D	-.266D	-.266D

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7x7 OA12 OA UPPER MPS NOZZLE (RBPD26)

SECTION : 1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .954 BETA (5) = 0.360

X/LNP	.250	.500	.750
PHI			
270.000	-.2740	-.2680	-.2740

AMES 11-7X7 OA12 O2A UPPER MPS NOZZLE (RBPD27) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0500 SCALE

PARAMETRIC DATA

ALPHA = -4.000 RUDDER = .000
ELEVON = -20.000 RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -4.910

X/LNP	.250	.500	.750
PHI			
.000	-.1310	-.1290	
90.000	-.1260	-.1240	-.1320
135.000	-.1280	-.1290	-.1330
180.000	-.1280	-.1290	-.1370
225.000	-.1260	-.1310	-.1320
270.000	-.1270	-.1350	-.1350

MACH (1) = .599 BETA (2) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1330	-.1240	
90.000	-.1280	-.1260	-.1220
135.000	-.1300	-.1250	-.1240
180.000	-.1240	-.1260	-.1220
225.000	-.1270	-.1270	-.1250
270.000	-.1270	-.1260	-.1240

MACH (1) = .599 BETA (3) = 5.260

X/LNP	.250	.500	.750
PHI			
.000	-.1310	-.1260	
90.000	-.1180	-.1240	-.1260
135.000	-.1320	-.1250	-.1170
180.000	-.1190	-.1210	-.1210
225.000	-.1230	-.1220	-.1180
270.000	-.1240	-.1230	-.1240

MACH (2) = .897 BETA (1) = -4.980

X/LNP	.250	.500	.750
PHI			
.000	-.1640	-.1520	
90.000	-.1560	-.1530	-.1510
135.000	-.1550	-.1570	-.1500
180.000	-.1480	-.1570	-.1580
225.000	-.1520	-.1510	-.1540
270.000	-.1520	-.1540	-.1510

MACH (2) = .898 BETA (2) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1530	-.1380	
90.000	-.1390	-.1350	-.1390
135.000	-.1410	-.1360	-.1390
180.000	-.1400	-.1380	-.1400
225.000	-.1400	-.1340	-.1370

AMES 11-7U7 OA12 O2A UPPER MPS NOZZLE (RBPD27)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .896 BETA (2) = .68U

X/LNP	.25U	.5UU	.75U
PHI			
27U.UUU	-.136U	-.136U	-.138U

MACH (2) = .899 BETA (3) = 5.33U

X/LNP	.25U	.5UU	.75U
PHI			
.UUU	-.18U0	-.15UU	
9U.UUU	-.158U	-.149U	-.142U
135.UUU	-.16UU	-.154U	-.135U
18U.UUU	-.156U	-.145U	-.15UU
225.UUU	-.147U	-.138U	-.144U
27U.UUU	-.15UU	-.146U	-.143U

AMES 11-7b7 OA12 OEA UPPER MPS NOZZLE (RBPD28) (01 MAY 73)

REFERENCE DATA

SREF =	2.421b SQ.FT.	XMRP =	28.53b0 INCHES		
LREF =	39.849b INCHES	YMRP =	.bbb0 INCHES		
BPEF =	39.849b INCHES	ZMRP =	.bbb0 INCHES		
SCALE =	.b3b0 SCALE				

PARAMETRIC DATA

ALPHA =	.bb0	RUDDER =	.bb0
ELEVON =	-2b.bb0	RUDFLR =	.bb0

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .597 BETA (1) = -7.97b

X/LNP	.25b	.5bb	.75b
PHI			
.bbb	-.152b	-.144b	
9b.bbb	-.144b	-.143b	-.144b
135.bbb	-.147b	-.147b	-.144b
18b.bbb	-.142b	-.144b	-.147b
225.bbb	-.142b	-.144b	-.145b
27b.bbb	-.144b	-.146b	-.141b

MACH (1) = .596 BETA (2) = -3.94b

X/LNP	.25b	.5bb	.75b
PHI			
.bbb	-.133b	-.13bb	
9b.bbb	-.135b	-.13bb	-.133b
135.bbb	-.134b	-.133b	-.13bb
18b.bbb	-.13bb	-.128b	-.13bb
225.bbb	-.129b	-.13bb	-.128b
27b.bbb	-.131b	-.131b	-.133b

MACH (1) = .598 BETA (3) = .09b

X/LNP	.25b	.5bb	.75b
PHI			
.bbb	-.132b	-.126b	
9b.bbb	-.13bb	-.129b	-.128b
135.bbb	-.137b	-.13bb	-.126b
18b.bbb	-.131b	-.126b	-.127b
225.bbb	-.132b	-.129b	-.126b
27b.bbb	-.129b	-.132b	-.124b

MACH (1) = .599 BETA (4) = 4.19b

X/LNP	.25b	.5bb	.75b
PHI			
.bbb	-.12bb	-.12bb	
9b.bbb	-.123b	-.118b	-.115b
135.bbb	-.125b	-.121b	-.121b
18b.bbb	-.119b	-.121b	-.118b
225.bbb	-.12bb	-.116b	-.113b
27b.bbb	-.12bb	-.122b	-.121b

MACH (1) = .598 BETA (5) = 8.29b

X/LNP	.25b	.5bb	.75b
PHI			
.bbb	-.124b	-.124b	
9b.bbb	-.125b	-.123b	-.132b
135.bbb	-.126b	-.125b	-.128b
18b.bbb	-.121b	-.127b	-.129b
225.bbb	-.124b	-.126b	-.127b

DATE 19 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPD28)

AMES 11-7ft OA12 02A UPPER MPS NOZZLE

SECTION (1)MPS NOZZLE

DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (5) = 8.290

X/LNP	.250	.500	.750
PHI			
270.000	-.1250	-.1300	-.1330

MACH (2) = .900 BETA (1) = -8.080

X/LNP	.250	.500	.750
PHI			
.000	-.1770	-.1630	
90.000	-.1630	-.1640	-.1610
135.000	-.1670	-.1650	-.1660
180.000	-.1630	-.1650	-.1660
225.000	-.1630	-.1610	-.1610
270.000	-.1680	-.1600	-.1590

MACH (2) = .897 BETA (2) = -4.000

X/LNP	.250	.500	.750
PHI			
.000	-.1620	-.1500	
90.000	-.1500	-.1500	-.1470
135.000	-.1490	-.1500	-.1480
180.000	-.1490	-.1450	-.1500
225.000	-.1530	-.1430	-.1480
270.000	-.1500	-.1500	-.1480

MACH (2) = .900 BETA (3) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1510	-.1410	
90.000	-.1360	-.1370	-.1400
135.000	-.1410	-.1400	-.1400
180.000	-.1390	-.1370	-.1360
225.000	-.1390	-.1360	-.1340
270.000	-.1410	-.1340	-.1350

MACH (2) = .904 BETA (4) = 4.240

X/LNP	.250	.500	.750
PHI			
.000	-.1490	-.1330	
90.000	-.1310	-.1420	-.1410
135.000	-.1410	-.1400	-.1400
180.000	-.1380	-.1380	-.1390
225.000	-.1390	-.1360	-.1360
270.000	-.1360	-.1460	-.1370

MACH (2) = .904 BETA (5) = 8.400

X/LNP	.250	.500	.750
PHI			
.000	-.1600	-.1480	
90.000	-.1450	-.1490	-.1450
135.000	-.1490	-.1480	-.1480
180.000	-.1430	-.1490	-.1540
225.000	-.1500	-.1400	-.1510

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPD28)

AMES 11-7U7 OA12 O2A UPPER MPS NOZZLE

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .9U4 BETA (5) = 8.4U0

X/LNP	.25U	.5U0	.75U
PHI			
27U.U00	-.149U	-.143U	-.15U0

AMES 11-7X7 OA12 OBA UPPER MPS NOZZLE (RBFD29) (01 MAY 73)

REFERENCE DATA

SREF = 2.421 SQ.FT. XMRP = 28.530 INCHES
LREF = 39.849 INCHES YMRP = .000 INCHES
BREF = 39.849 INCHES ZMRP = .000 INCHES
SCALE = .030 SCALE

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000
ELEVON = -20.000 RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -8.030

X/LNP	.250	.500	.750
PHI			
.000	-.1520	-.1460	
90.000	-.1490	-.1480	-.1480
135.000	-.1500	-.1520	-.1520
180.000	-.1470	-.1490	-.1540
225.000	-.1470	-.1450	-.1520
270.000	-.1490	-.1530	-.1540

MACH (1) = .598 BETA (2) = -3.980

X/LNP	.250	.500	.750
PHI			
.000	-.1360	-.1290	
90.000	-.1330	-.1250	-.1340
135.000	-.1330	-.1310	-.1330
180.000	-.1310	-.1320	-.1340
225.000	-.1350	-.1330	-.1330
270.000	-.1330	-.1330	-.1330

MACH (1) = .598 BETA (3) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1320	-.1290	
90.000	-.1300	-.1310	-.1210
135.000	-.1320	-.1270	-.1290
180.000	-.1290	-.1260	-.1340
225.000	-.1290	-.1250	-.1230
270.000	-.1290	-.1270	-.1290

MACH (1) = .600 BETA (4) = 4.160

X/LNP	.250	.500	.750
PHI			
.000	-.1310	-.1240	
90.000	-.1280	-.1300	-.1270
135.000	-.1350	-.1260	-.1270
180.000	-.1260	-.1220	-.1320
225.000	-.1240	-.1280	-.1310
270.000	-.1290	-.1320	-.1350

MACH (1) = .597 BETA (5) = 8.250

X/LNP	.250	.500	.750
PHI			
.000	-.1470	-.1430	
90.000	-.1500	-.1450	-.1480
135.000	-.1500	-.1460	-.1450
180.000	-.1440	-.1530	-.1500
225.000	-.1460	-.1500	-.1500

AMES 11-7U7 OA12 O2A UPPER MPS NOZZLE (RBFD29)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .597 BETA (5) = 8.25U

X/LNP	.25U	.5UU	.75U
PHI			
27U.UUU	-.144U	-.149U	-.149U

MACH (2) = .898 BETA (1) = -8.13U

X/LNP	.25U	.5UU	.75U
PHI			
.UUU	-.193U	-.178U	
9U.UUU	-.176U	-.179U	-.174U
135.UUU	-.18UU	-.179U	-.173U
18U.UUU	-.178U	-.181U	-.172U
225.UUU	-.177U	-.177U	-.172U
27U.UUU	-.177U	-.177U	-.166U

MACH (2) = .9U2 BETA (2) = -4.02U

X/LNP	.25U	.5UU	.75U
PHI			
.UUU	-.161U	-.141U	
9U.UUU	-.144U	-.149U	-.149U
135.UUU	-.149U	-.147U	-.146U
18U.UUU	-.146U	-.146U	-.147U
225.UUU	-.148U	-.144U	-.148U
27U.UUU	-.146U	-.146U	-.148U

MACH (2) = .899 BETA (3) = .08U

X/LNP	.25U	.5UU	.75U
PHI			
.UUU	-.156U	-.139U	
9U.UUU	-.142U	-.144U	-.143U
135.UUU	-.143U	-.145U	-.145U
18U.UUU	-.145U	-.144U	-.146U
225.UUU	-.14UU	-.139U	-.139U
27U.UUU	-.137U	-.144U	-.142U

MACH (2) = .897 BETA (4) = 4.21U

X/LNP	.25U	.5UU	.75U
PHI			
.UUU	-.154U	-.141U	
9U.UUU	-.145U	-.144U	-.146U
135.UUU	-.15UU	-.145U	-.143U
18U.UUU	-.144U	-.147U	-.143U
225.UUU	-.15UU	-.145U	-.138U
27U.UUU	-.141U	-.142U	-.139U

MACH (2) = .896 BETA (5) = 8.34U

X/LNP	.25U	.5UU	.75U
PHI			
.UUU	-.167U	-.158U	
9U.UUU	-.16UU	-.162U	-.158U
135.UUU	-.163U	-.162U	-.159U
18U.UUU	-.159U	-.162U	-.166U
225.UUU	-.156U	-.157U	-.158U

AMES 11-7X7 OA12 02A UPPER MPS NOZZLE (RBFD29)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .896 BETA (5) = 8.340

X/LNP	.250	.500	.750
PHI			
270.000	-.1600	-.1650	-.1570

AMES 11-7X7 OA12 02A UPPER MPS NOZZLE (RBPD30) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 10.000 RUDDER = .000
ELEVON = -20.000 RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -8.050

X/LNP	.250	.500	.750
PHI			
.000	-.1700	-.1700	
90.000	-.1690	-.1700	-.1690
135.000	-.1700	-.1700	-.1730
180.000	-.1740	-.1680	-.1730
225.000	-.1680	-.1700	-.1730
270.000	-.1700	-.1740	-.1700

MACH (1) = .599 BETA (2) = -3.980

X/LNP	.250	.500	.750
PHI			
.000	-.1490	-.1500	
90.000	-.1470	-.1450	-.1550
135.000	-.1510	-.1510	-.1470
180.000	-.1430	-.1540	-.1480
225.000	-.1500	-.1460	-.1490
270.000	-.1550	-.1530	-.1450

MACH (1) = .598 BETA (3) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1440	-.1410	
90.000	-.1420	-.1380	-.1410
135.000	-.1420	-.1440	-.1410
180.000	-.1380	-.1410	-.1380
225.000	-.1410	-.1420	-.1410
270.000	-.1410	-.1430	-.1390

MACH (1) = .598 BETA (4) = 4.150

X/LNP	.250	.500	.750
PHI			
.000	-.1400	-.1390	
90.000	-.1400	-.1400	-.1430
135.000	-.1440	-.1410	-.1410
180.000	-.1430	-.1430	-.1430
225.000	-.1410	-.1390	-.1360
270.000	-.1400	-.1410	-.1380

MACH (1) = .598 BETA (5) = 8.230

X/LNP	.250	.500	.750
PHI			
.000	-.1680	-.1620	
90.000	-.1650	-.1640	-.1650
135.000	-.1650	-.1640	-.1630
180.000	-.1630	-.1630	-.1620
225.000	-.1630	-.1660	-.1630

AMES 11-7?? OA12 OEA UPPER MPS NOZZLE (RBPD30)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .998 BETA (5) = 8.230

X/LNP	.250	.500	.750
PHI			
270.000	-.1620	-.1660	-.1610

MACH (2) = .901 BETA (1) = -8.160

X/LNP	.250	.500	.750
PHI			
.000	-.1840	-.1860	
90.000	-.1850	-.1810	-.1880
135.000	-.1900	-.1810	-.1890
180.000	-.1910	-.1860	-.1880
225.000	-.1890	-.1870	-.1840
270.000	-.1840	-.1830	-.1850

MACH (2) = .901 BETA (2) = -4.040

X/LNP	.250	.500	.750
PHI			
.000	-.1670	-.1730	
90.000	-.1570	-.1690	-.1730
135.000	-.1660	-.1730	-.1740
180.000	-.1660	-.1690	-.1760
225.000	-.1640	-.1670	-.1710
270.000	-.1730	-.1680	-.1710

MACH (2) = .903 BETA (3) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1670	-.1590	
90.000	-.1670	-.1640	-.1610
135.000	-.1690	-.1650	-.1610
180.000	-.1660	-.1660	-.1660
225.000	-.1600	-.1630	-.1660
270.000	-.1590	-.1590	-.1630

MACH (2) = .902 BETA (4) = 4.190

X/LNP	.250	.500	.750
PHI			
.000	-.1610	-.1710	
90.000	-.1580	-.1690	-.1670
135.000	-.1590	-.1710	-.1650
180.000	-.1590	-.1680	-.1710
225.000	-.1560	-.1620	-.1640
270.000	-.1610	-.1670	-.1630

MACH (2) = .905 BETA (5) = 8.320

X/LNP	.250	.500	.750
PHI			
.000	-.1790	-.1790	
90.000	-.1780	-.1750	-.1760
135.000	-.1790	-.1810	-.1760
180.000	-.1760	-.1720	-.1780
225.000	-.1730	-.1820	-.1760

AMES 11-7X7 OA12 O2A UPPER MPS NOZZLE (RBPD3U)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .9[illegible] BETA (5) = 0.32[illegible]

X/LNP	.25[illegible]	.5[illegible]	.75[illegible]
PHI			
27[illegible].[illegible]	-.178[illegible]	-.181[illegible]	-.178[illegible]

AMES 11-7ft OA12 OBA UPPER MPS NOZZLE (RBPD31) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 15.000 RUDDER = .000
ELEVON = -20.000 RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -8.040

X/LNP	.250	.500	.750
PHI			
.000	-.1980	-.1910	
90.000	-.1910	-.1940	-.1910
135.000	-.1990	-.1930	-.1930
180.000	-.1930	-.1920	-.1940
225.000	-.1900	-.1910	-.1930
270.000	-.1920	-.1900	-.1890

MACH (1) = .598 BETA (2) = -3.980

X/LNP	.250	.500	.750
PHI			
.000	-.1770	-.1800	
90.000	-.1800	-.1810	-.1770
135.000	-.1840	-.1830	-.1760
180.000	-.1800	-.1780	-.1750
225.000	-.1770	-.1770	-.1790
270.000	-.1800	-.1830	-.1720

MACH (1) = .598 BETA (3) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1790	-.1730	
90.000	-.1730	-.1750	-.1700
135.000	-.1750	-.1700	-.1700
180.000	-.1750	-.1720	-.1690
225.000	-.1730	-.1770	-.1720
270.000	-.1760	-.1750	-.1730

MACH (1) = .599 BETA (4) = 4.170

X/LNP	.250	.500	.750
PHI			
.000	-.1700	-.1670	
90.000	-.1690	-.1700	-.1650
135.000	-.1730	-.1710	-.1650
180.000	-.1660	-.1720	-.1650
225.000	-.1670	-.1670	-.1660
270.000	-.1670	-.1710	-.1650

MACH (1) = .597 BETA (5) = 8.240

X/LNP	.250	.500	.750
PHI			
.000	-.1900	-.1810	
90.000	-.1910	-.1810	-.1830
135.000	-.1930	-.1880	-.1860
180.000	-.1850	-.1850	-.1820
225.000	-.1820	-.1890	-.1830

AMES 11-7X7 OA12 O2A UPPER MPS NOZZLE (PBPD31)

SECTION / 1:MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .597 BETA (5) = 8.24D

X/LNP	.25D	.50D	.75D
PHI			
270.00D	-.186D	-.194D	-.182D

MACH (2) = .898 BETA (1) = -8.13D

X/LNP	.25D	.50D	.75D
PHI			
.00D	-.208D	-.211D	
90.00D	-.207D	-.208D	-.206D
135.00D	-.214D	-.211D	-.205D
180.00D	-.207D	-.211D	-.209D
225.00D	-.211D	-.207D	-.205D
270.00D	-.211D	-.208D	-.207D

MACH (2) = .901 BETA (2) = -4.02D

X/LNP	.25D	.50D	.75D
PHI			
.00D	-.183D	-.179D	
90.00D	-.182D	-.182D	-.185D
135.00D	-.184D	-.183D	-.186D
180.00D	-.179D	-.187D	-.195D
225.00D	-.180D	-.181D	-.190D
270.00D	-.180D	-.192D	-.193D

MACH (2) = .901 BETA (3) = .68D

X/LNP	.25D	.50D	.75D
PHI			
.00D	-.197D	-.191D	
90.00D	-.191D	-.192D	-.192D
135.00D	-.196D	-.194D	-.192D
180.00D	-.191D	-.192D	-.194D
225.00D	-.191D	-.192D	-.187D
270.00D	-.189D	-.193D	-.193D

MACH (2) = .897 BETA (4) = 4.20D

X/LNP	.25D	.50D	.75D
PHI			
.00D	-.186D	-.185D	
90.00D	-.182D	-.184D	-.185D
135.00D	-.196D	-.188D	-.190D
180.00D	-.191D	-.187D	-.191D
225.00D	-.186D	-.186D	-.187D
270.00D	-.189D	-.184D	-.186D

MACH (2) = .898 BETA (5) = 8.33D

X/LNP	.25D	.50D	.75D
PHI			
.00D	-.208D	-.205D	
90.00D	-.207D	-.205D	-.198D
135.00D	-.211D	-.208D	-.199D
180.00D	-.205D	-.206D	-.205D
225.00D	-.205D	-.206D	-.206D

AMES 11-7U7 OA12 O2A UPPER MPS NOZZLE (RBP031)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .898 BETA (5) = 0.33U

X/LNP	.250	.500	.750
PHI			
270.000	-.2030	-.2080	-.2090

AMES 11-7U7 OA12 OEA UPPER MPS NOZZLE (RBPD32) (31 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 20.000 RUDDER = .000
ELEVON = -20.000 RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -7.980

X/LNP	.250	.500	.750
PHI			
.000	-.2280	-.2290	
90.000	-.2300	-.2290	-.2290
135.000	-.2350	-.2310	-.2320
180.000	-.2290	-.2340	-.2320
225.000	-.2280	-.2240	-.2300
270.000	-.2190	-.2290	-.2290

MACH (1) = .597 BETA (2) = -3.990

X/LNP	.250	.500	.750
PHI			
.000	-.2230	-.2150	
90.000	-.2150	-.2140	-.2260
135.000	-.2200	-.2170	-.2250
180.000	-.2220	-.2190	-.2180
225.000	-.2180	-.2180	-.2180
270.000	-.2180	-.2190	-.2180

MACH (1) = .599 BETA (3) = .070

X/LNP	.250	.500	.750
PHI			
.000	-.2230	-.2230	
90.000	-.2220	-.2220	-.2260
135.000	-.2250	-.2220	-.2190
180.000	-.2210	-.2210	-.2260
225.000	-.2230	-.2200	-.2260
270.000	-.2230	-.2180	-.2180

MACH (1) = .598 BETA (4) = 4.190

X/LNP	.250	.500	.750
PHI			
.000	-.2160	-.2170	
90.000	-.2130	-.2160	-.2130
135.000	-.2180	-.2170	-.2190
180.000	-.2180	-.2140	-.2130
225.000	-.2140	-.2090	-.2060
270.000	-.2180	-.2090	-.2040

MACH (1) = .600 BETA (5) = 8.290

X/LNP	.250	.500	.750
PHI			
.000	-.2220	-.2320	
90.000	-.2230	-.2290	-.2240
135.000	-.2260	-.2320	-.2320
180.000	-.2240	-.2320	-.2270
225.000	-.2260	-.2190	-.2320

AMES 11-7U7 OA12 O2A UPPER MPS NOZZLE (RBPD32)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .6U0 BETA (5) = 0.29U

X/LNP	.25U	.5U0	.75U
PHI			
27U.UU0	-.23U0	-.226U	-.226U

MACH (2) = .9U2 BETA (1) = -0.07U

X/LNP	.25U	.5U0	.75U
PHI			
.UU0	-.255U	-.252U	
9U.UU0	-.253U	-.251U	-.25U0
135.UU0	-.253U	-.25U0	-.25U0
18U.UU0	-.252U	-.25U0	-.251U
225.UU0	-.253U	-.25U0	-.25U0
27U.UU0	-.252U	-.25U0	-.25U0

MACH (2) = .898 BETA (2) = -4.000

X/LNP	.25U	.5U0	.75U
PHI			
.UU0	-.248U	-.247U	
9U.UU0	-.251U	-.251U	-.253U
135.UU0	-.249U	-.241U	-.249U
18U.UU0	-.245U	-.247U	-.25U0
225.UU0	-.25U0	-.251U	-.248U
27U.UU0	-.243U	-.25U0	-.248U

MACH (2) = .9U5 BETA (3) = .07U

X/LNP	.25U	.5U0	.75U
PHI			
.UU0	-.25U0	-.243U	
9U.UU0	-.241U	-.244U	-.247U
135.UU0	-.249U	-.248U	-.247U
18U.UU0	-.247U	-.245U	-.249U
225.UU0	-.248U	-.246U	-.249U
27U.UU0	-.249U	-.247U	-.25U0

MACH (2) = .897 BETA (4) = 4.22U

X/LNP	.25U	.5U0	.75U
PHI			
.UU0	-.263U	-.254U	
9U.UU0	-.263U	-.255U	-.25U0
135.UU0	-.261U	-.254U	-.247U
18U.UU0	-.253U	-.254U	-.246U
225.UU0	-.258U	-.258U	-.242U
27U.UU0	-.259U	-.253U	-.241U

MACH (2) = .9U1 BETA (5) = 0.36U

X/LNP	.25U	.5U0	.75U
PHI			
.UU0	-.257U	-.256U	
9U.UU0	-.264U	-.255U	-.249U
135.UU0	-.25[illegible]	-.25[illegible]U	-.25U0
18U.UU0	-.247U	-.254U	-.257U
225.UU0	-.25[illegible]	-.246U	-.255U

AMES 11-7X7 OA12 OBA UPPER MPS NOZZLE (PBPD32)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .901 BETA (5) = 8.360

X/LNP	.250	.500	.750
PHI			
270.000	-.2520	-.2500	-.2560

AMES 11-7X7 OA12 O2A UPPER MPS NOZZLE (RBPD33) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5390 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0390 SCALE

PARAMETRIC DATA

ALPHA = -4.000 RUDDER = .000
ELEVON = .000 RUDFLR = 40.000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -4.910

X/LNP	.250	.500	.750
PHI			
.000	-.1830	-.1760	
90.000	-.1730	-.1750	-.1810
135.000	-.1750	-.1790	-.1860
180.000	-.1770	-.1790	-.1900
225.000	-.1710	-.1770	-.1890
270.000	-.1740	-.1830	-.1890

MACH (1) = .599 BETA (2) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1790	-.1670	
90.000	-.1760	-.1710	-.1720
135.000	-.1760	-.1750	-.1730
180.000	-.1690	-.1710	-.1750
225.000	-.1690	-.1700	-.1680
270.000	-.1690	-.1730	-.1700

MACH (1) = .598 BETA (3) = 5.280

X/LNP	.250	.500	.750
PHI			
.000	-.1910	-.1780	
90.000	-.1780	-.1770	-.1750
135.000	-.1800	-.1790	-.1780
180.000	-.1830	-.1760	-.1770
225.000	-.1760	-.1770	-.1740
270.000	-.1750	-.1770	-.1780

MACH (2) = .899 BETA (1) = -4.990

X/LNP	.250	.500	.750
PHI			
.000	-.2210	-.2050	
90.000	-.2180	-.2110	-.2080
135.000	-.2120	-.2150	-.2090
180.000	-.2090	-.2140	-.2120
225.000	-.2120	-.2090	-.2050
270.000	-.2090	-.2100	-.2100

MACH (2) = .899 BETA (2) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1870	-.1860	
90.000	-.1800	-.1880	-.1880
135.000	-.1860	-.1930	-.1900
180.000	-.1810	-.1900	-.1970
225.000	-.1820	-.1850	-.1920

AMES 11-7D7 OA12 O2A UPPER MPS NOZZLE (RBPD33)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .899 BETA (2) = .000

X/LNP	.250	.500	.750
PHI			
270.000	-.1850	-.1890	-.1950

MACH (2) = .900 BETA (3) = 5.350

X/LNP	.250	.500	.750
PHI			
.000	-.2030	-.1920	
90.000	-.1930	-.1990	-.1930
135.000	-.1980	-.1990	-.1940
180.000	-.1960	-.1960	-.2020
225.000	-.1950	-.1960	-.1950
270.000	-.1920	-.1980	-.1930

AMES 11-7X7 OA12 O2A UPPER MPS NOZZLE (RBPD34) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.53[illegible] INCHES
LREF = 39.849[illegible] INCHES YMRP = .[illegible] INCHES
BREF = 39.849[illegible] INCHES ZMRP = .[illegible] INCHES
SCALE = .[illegible] SCALE

PARAMETRIC DATA

ALPHA = .[illegible] RUDDER = .[illegible]
ELEVON = .[illegible] RUDFLR = [illegible].[illegible]

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -7.990

X/LNP	.250	.500	.750
PHI			
.[illegible]	-.2070	-.1940	
9[illegible].[illegible]	-.1960	-.1890	-.1980
13[illegible].[illegible]	-.1980	-.1990	-.1970
18[illegible].[illegible]	-.1910	-.1940	-.2010
225.[illegible]	-.1940	-.1930	-.1930
270.[illegible]	-.1970	-.1970	-.1930

MACH (1) = .599 BETA (2) = -3.950

X/LNP	.250	.500	.750
PHI			
.[illegible]	-.1850	-.1720	
90.[illegible]	-.1770	-.1760	-.1810
135.[illegible]	-.1810	-.1790	-.1770
180.[illegible]	-.1780	-.1740	-.1810
225.[illegible]	-.1730	-.1760	-.1770
270.[illegible]	-.1690	-.1760	-.1780

MACH (1) = .599 BETA (3) = .090

X/LNP	.2[illegible]	.500	.750
PHI			
.[illegible]	-.1740	-.1620	
90.[illegible]	-.1640	-.1640	-.1640
135.[illegible]	-.1670	-.1700	-.1620
180.[illegible]	-.1670	-.1660	-.1700
225.[illegible]	-.1610	-.1660	-.1670
270.[illegible]	-.1670	-.1640	-.1640

MACH (1) = .599 BETA (4) = 4.200

X/LNP	.250	.500	.750
PHI			
.[illegible]	-.1880	-.1680	
90.[illegible]	-.1760	-.1740	-.1720
135.[illegible]	-.1730	-.1700	-.1690
180.[illegible]	-.1710	-.1710	-.1720
225.[illegible]	-.1720	-.1690	-.1670
270.[illegible]	-.1690	-.1720	-.1660

MACH (1) = .599 BETA (5) = 8.310

X/LNP	.250	.500	.750
PHI			
.[illegible]	-.1960	-.1790	
90.[illegible]	-.1970	-.1790	-.1830
135.[illegible]	-.1890	-.1840	-.1820
180.[illegible]	-.1840	-.1870	-.1870
225.[illegible]	-.1810	-.1860	-.1830

AMES 11-7U7 OA12 O2A UPPER MPS NOZZLE (RBPD34)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .999 BETA (5) = 8.310

X/LNP	.250	.500	.750
PHI			
270.000	-.193U	-.186U	-.181U

MACH (2) = .899 BETA (1) = -8.100

X/LNP	.250	.500	.750
PHI			
.000	-.215U	-.210U	
90.000	-.200U	-.214U	-.223U
135.000	-.206U	-.218U	-.223U
180.000	-.204U	-.220U	-.225U
225.000	-.207U	-.222U	-.222U
270.000	-.212U	-.224U	-.225U

MACH (2) = .897 BETA (2) = -4.010

X/LNP	.250	.500	.750
PHI			
.000	-.208U	-.197U	
90.000	-.198U	-.199U	-.191U
135.000	-.199U	-.201U	-.196U
180.000	-.197U	-.197U	-.201U
225.000	-.194U	-.194U	-.194U
270.000	-.199U	-.199U	-.192U

MACH (2) = .898 BETA (3) = .08U

X/LNP	.250	.500	.750
PHI			
.000	-.191U	-.177U	
90.000	-.182U	-.185U	-.183U
135.000	-.183U	-.184U	-.183U
180.000	-.181U	-.183U	-.186U
225.000	-.179U	-.178U	-.181U
270.000	-.178U	-.182U	-.181U

MACH (2) = .896 BETA (4) = 4.25U

X/LNP	.250	.500	.750
PHI			
.000	-.202U	-.181U	
90.000	-.186U	-.182U	-.175U
135.000	-.188U	-.183U	-.179U
180.000	-.185U	-.177U	-.185U
225.000	-.186U	-.181U	-.178U
270.000	-.183U	-.186U	-.183U

MACH (2) = .901 BETA (5) = 8.43U

X/LNP	.250	.500	.750
PHI			
.000	-.214U	-.204U	
90.000	-.208U	-.207U	-.208U
135.000	-.213U	-.212U	-.209U
180.000	-.208U	-.206U	-.209U
225.000	-.208U	-.209U	-.204U

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBFD34)

AMES 11-7U7 OA12 O2A UPPER MPS NOZZLE

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .9U2 BETA (5) = 8.43U

X/LFP	.25U	.5U[illegible]	.75U
PHI			
27U.UUU	-.2110	-.2120	-.2070

AMES 11-707 OA12 O2A UPPER MPS NOZZLE (RBPD35) (01 MAY 73)

REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0350 SCALE

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000
ELEVON = .000 RUDFLR = 40.000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -8.040

X/LNP	.250	.500	.750
PHI			
.000	-.2030	-.1930	
90.000	-.1970	-.1940	-.1960
135.000	-.2050	-.1960	-.1990
180.000	-.1930	-.1940	-.2010
225.000	-.1990	-.1950	-.1980
270.000	-.1960	-.2000	-.1960

MACH (1) = .599 BETA (2) = -3.980

X/LNP	.250	.500	.750
PHI			
.000	-.1990	-.1900	
90.000	-.1880	-.1860	-.1860
135.000	-.1920	-.1880	-.1840
180.000	-.1870	-.1840	-.1900
225.000	-.1830	-.1810	-.1830
270.000	-.1880	-.1870	-.1830

MACH (1) = .599 BETA (3) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1840	-.1700	
90.000	-.1740	-.1710	-.1700
135.000	-.1780	-.1730	-.1650
180.000	-.1720	-.1750	-.1760
225.000	-.1720	-.1700	-.1720
270.000	-.1700	-.1720	-.1680

MACH (1) = .599 BETA (4) = 4.170

X/LNP	.250	.500	.750
PHI			
.000	-.1870	-.1790	
90.000	-.1810	-.1800	-.1800
135.000	-.1860	-.1830	-.1850
180.000	-.1790	-.1810	-.1840
225.000	-.1790	-.1770	-.1810
270.000	-.1800	-.1800	-.1760

MACH (1) = .600 BETA (5) = 8.260

X/LNP	.250	.500	.750
PHI			
.000	-.2010	-.2000	
90.000	-.1950	-.1960	-.1930
135.000	-.1970	-.1980	-.1950
180.000	-.1940	-.2000	-.1990
225.000	-.1910	-.1950	-.1950

AMES 11-7U7 OA12 O2A UPPER MPS NOZZLE (RBPD35)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .6U0 BETA (5) = 0.26U

X/LNP	.25U	.50U	.75U
PHI			
27U.UU0	-.19U0	-.197U	-.195U

MACH (2) = .9U3 BETA (1) = -0.16U

X/LNP	.25U	.50U	.75U
PHI			
.0U0	-.211U	-.216U	
9U.UU0	-.206U	-.223U	-.219U
135.UU0	-.208U	-.222U	-.223U
18U.UU0	-.206U	-.219U	-.223U
225.UU0	-.208U	-.217U	-.221U
27U.UU0	-.209U	-.221U	-.22U0

MACH (2) = .902 BETA (2) = -4.04U

X/LNP	.25U	.5U0	.75U
PHI			
.UU0	-.195U	-.195U	
9U.UU0	-.19U0	-.195U	-.191U
135.UU0	-.19U0	-.197U	-.195U
18U.UU0	-.191U	-.196U	-.199U
225.UU0	-.187U	-.197U	-.197U
27U.UU0	-.189U	-.199U	-.197U

MACH (2) = .904 BETA (3) = .08U

X/LNP	.25U	.5U0	.75U
PHI			
.UU0	-.183U	-.186U	
9U.UU0	-.178U	-.187U	-.189U
135.UU0	-.181U	-.186U	-.182U
18U.UU0	-.182U	-.187U	-.19U0
225.UU0	-.178U	-.187U	-.186U
27U.UU0	-.181U	-.189U	-.185U

MACH (2) = .902 BETA (4) = 4.22U

X/LNP	.25U	.5U0	.75U
PHI			
.UU0	-.192U	-.186U	
9U.UU0	-.19U0	-.187U	-.188U
135.UU0	-.188U	-.193U	-.19U0
18U.UU0	-.183U	-.189U	-.19U0
225.UU0	-.184U	-.187U	-.182U
27U.UU0	-.19U0	-.191U	-.189U

MACH (2) = .898 BETA (5) = 0.37U

X/LNP	.25U	.50U	.75U
PHI			
.UU0	-.212U	-.2U4U	
9U.UU0	-.2U2U	-.2U8U	-.2U3U
135.UU0	-.205U	-.205U	-.2U0U
18U.UU0	-.198U	-.2U4U	-.2U8U
225.UU0	-.2U2U	-.2U4U	-.199U

AMES 11-7X7 OA12 OEA UPPER MPS NOZZLE (RBFD35)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .898 BETA (5) = 0.370

X/LNP	.250	.500	.750
PHI			
270.000	-.2040	-.2130	-.1980

AMES 11-707 OA12 02A UPPER MPS NOZZLE (RBPD36) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 10.000 RUDDER = .000
ELEVON = .000 RUDFLR = 40.000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -8.070

X/LNP	.250	.500	.750
PHI			
.000	-.2180	-.2100	
90.000	-.2110	-.2120	-.2090
135.000	-.2170	-.2150	-.2130
180.000	-.2120	-.2100	-.2120
225.000	-.2160	-.2140	-.2090
270.000	-.2120	-.2110	-.2100

MACH (1) = .598 BETA (2) = -3.990

X/LNP	.250	.500	.750
PHI			
.000	-.2010	-.2000	
90.000	-.1960	-.1980	-.1990
135.000	-.1980	-.1970	-.1980
180.000	-.1960	-.2010	-.2020
225.000	-.1960	-.1980	-.2040
270.000	-.1960	-.2020	-.2000

MACH (1) = .599 BETA (3) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1980	-.1870	
90.000	-.1940	-.1890	-.1[illegible]0
135.000	-.1960	-.1930	-.1880
180.000	-.1940	-.1890	-.1920
225.000	-.1920	-.1850	-.1850
270.000	-.1880	-.1880	-.1910

MACH (1) = .601 BETA (4) = 4.160

X/LNP	.250	.500	.750
PHI			
.000	-.1980	-.1930	
90.000	-.1940	-.1920	-.1900
135.000	-.1950	-.1960	-.1900
180.000	-.1950	-.1930	-.1950
225.000	-.1930	-.1930	-.1940
270.000	-.1920	-.1960	-.1910

MACH (1) = .599 BETA (5) = 8.230

X/LNP	.250	.500	.750
PHI			
.000	-.2210	-.2110	
90.000	-.2100	-.2100	-.2070
135.000	-.2140	-.2110	-.2050
180.000	-.2110	-.2100	-.2060
225.000	-.2060	-.2070	-.2040

AMES 11-7U7 OA12 O2A UPPER MPS NOZZLE (RBPD36)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (5) = 8.230

X/LNP	.250	.500	.750
PHI			
270.000	-.2090	-.2090	-.2020

MACH (2) = .903 BETA (1) = -8.170

X/LNP	.250	.500	.750
PHI			
.000	-.2380	-.2280	
90.000	-.2340	-.2320	-.2330
135.000	-.2340	-.2340	-.2350
180.000	-.2290	-.2340	-.2370
225.000	-.2280	-.2330	-.2330
270.000	-.2290	-.2320	-.2380

MACH (2) = .903 BETA (2) = -4.050

X/LNP	.250	.500	.750
PHI			
.000	-.2160	-.2160	
90.000	-.2110	-.2170	-.2170
135.000	-.2180	-.2210	-.2130
180.000	-.2180	-.2180	-.2180
225.000	-.2150	-.2160	-.2140
270.000	-.2190	-.2150	-.2140

MACH (2) = .899 BETA (3) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.2080	-.1960	
90.000	-.2060	-.2020	-.2040
135.000	-.2020	-.2040	-.2030
180.000	-.2000	-.2030	-.2070
225.000	-.2040	-.1990	-.2030
270.000	-.2010	-.2010	-.2030

MACH (2) = .897 BETA (4) = 4.200

X/LNP	.250	.500	.750
PHI			
.000	-.2110	-.1980	
90.000	-.2070	-.2010	-.2050
135.000	-.2040	-.2020	-.2020
180.000	-.2050	-.2120	-.2050
225.000	-.2000	-.2070	-.2010
270.000	-.1950	-.2080	-.2020

MACH (2) = .902 BETA (5) = 8.330

X/LNP	.250	.500	.750
PHI			
.000	-.2280	-.2180	
90.000	-.2240	-.2260	-.2280
135.000	-.2220	-.2350	-.2280
180.000	-.2210	-.2270	-.2230
225.000	-.2250	-.2180	-.2260

AMES 11-7?7 OA12 O2A UPPER MPS NOZZLE (RBFD36)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .902 BETA (5) = 8.330

X/LNP	.250	.500	.750
PHI			
270.000	-.2250	-.2210	-.2270

AMES 11-7ft OA12 O2A UPPER MPS NOZZLE (RBPD37) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0900 SCALE

PARAMETRIC DATA

ALPHA = 15.000 RUDDER = .000
ELEVON = .000 RUDFLR = 40.000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .596 BETA (1) = -8.050

X/LNP	.250	.500	.750
PHI			
.000	-.2550	-.2440	
90.000	-.2460	-.2510	-.2490
135.000	-.2460	-.2460	-.2410
180.000	-.2460	-.2430	-.2510
225.000	-.2480	-.2520	-.2500
270.000	-.2490	-.2500	-.2490

MACH (1) = .598 BETA (2) = -3.990

X/LNP	.250	.500	.750
PHI			
.000	-.2340	-.2280	
90.000	-.2250	-.2270	-.2340
135.000	-.2280	-.2250	-.2330
180.000	-.2240	-.2330	-.2320
225.000	-.2240	-.2310	-.2250
270.000	-.2310	-.2290	-.2260

MACH (1) = .598 BETA (3) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.2430	-.2300	
90.000	-.2340	-.2300	-.2300
135.000	-.2340	-.2290	-.2310
180.000	-.2300	-.2280	-.2310
225.000	-.2300	-.2280	-.2280
270.000	-.2300	-.2280	-.2300

MACH (1) = .596 BETA (4) = 4.160

X/LNP	.250	.500	.750
PHI			
.000	-.2240	-.2180	
90.000	-.2210	-.2200	-.2190
135.000	-.2270	-.2190	-.2240
180.000	-.2240	-.2170	-.2230
225.000	-.2220	-.2180	-.2240
270.000	-.2210	-.2180	-.2250

MACH (1) = .597 BETA (5) = 8.250

X/LNP	.250	.500	.750
PHI			
.000	-.2450	-.2350	
90.000	-.2300	-.2340	-.2400
135.000	-.2370	-.2320	-.2440
180.000	-.2340	-.2370	-.2490
225.000	-.2360	-.2380	-.2430

AMES 11-7U7 OA12 O2A UPPER MPS NOZZLE (RBPD37)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .597 BETA (5) = 8.25U

X/LNP	.25U	.5U	.75U
PHI			
27U.UU	-.231U	-.234U	-.238U

MACH (2) = .699 BETA (1) = -8.15U

X/LNP	.25U	.5U	.75U
PHI			
.UU	-.263U	-.253U	
9U.UU	-.256U	-.251U	-.255U
135.UU	-.253U	-.255U	-.247U
18U.UU	-.256U	-.253U	-.254U
225.UU	-.252U	-.246U	-.255U
27U.UU	-.255U	-.255U	-.256U

MACH (2) = .897 BETA (2) = -4.U3U

X/LNP	.25U	.5U	.75U
PHI			
.UU	-.243U	-.244U	
9U.UU	-.238U	-.246U	-.241U
135.UU	-.236U	-.241U	-.244U
18U.UU	-.241U	-.241U	-.237U
225.UU	-.242U	-.236U	-.241U
27U.UU	-.244U	-.236U	-.238U

MACH (2) = .9U3 BETA (3) = .07U

X/LNP	.25U	.5U	.75U
PHI			
.UU	-.242U	-.242U	
9U.UU	-.229U	-.241U	-.231U
135.UU	-.234U	-.236U	-.241U
18U.UU	-.234U	-.235U	-.241U
225.UU	-.231U	-.234U	-.237U
27U.UU	-.233U	-.239U	-.234U

MACH (2) = .9U2 BETA (4) = 4.2U

X/LNP	.25U	.5U	.75U
PHI			
.UU	-.237U	-.231U	
9U.UU	-.234U	-.237U	-.237U
135.UU	-.238U	-.242U	-.237U
18U.UU	-.236U	-.236U	-.244U
225.UU	-.235U	-.232U	-.239U
27U.UU	-.236U	-.241U	-.234U

MACH (2) = .9U2 BETA (5) = 8.33U

X/LNP	.25U	.5U	.75U
PHI			
.UU	-.259U	-.249U	
9U.UU	-.253U	-.242U	-.245U
135.UU	-.249U	-.251U	-.242U
18U.UU	-.249U	-.261U	-.251U
225.UU	-.251U	-.251U	-.247U

AMES 11-7X7 OA12 O2A UPPER MPS NOZZLE (RBFD37)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .942 BETA (5) = 0.330

X/LNP	.250	.500	.750
PHI			
270.000	-.2460	-.2510	-.2520

AMES 11-707 OA12 O2A UPPER MPS NOZZLE (RBPD38) (01 MAY 73)

REFERENCE DATA

SREF = 2.421U SQ.FT. XMRP = 28.53UU INCHES
LREF = 39.849U INCHES YMRP = .UUUU INCHES
BREF = 39.849U INCHES ZMRP = .UUUU INCHES
SCALE = .UUUU SCALE

PARAMETRIC DATA

ALPHA = 2U.UUU RUDDER = .UUU
ELEVON = .UUU RUDFLR = 4U.UUU

SECTION (1)MPS NOZZLE

DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -8.UUU

X/LNP	.250	.500	.750
PHI			
.UUU	-.2850	-.2790	
90.UUU	-.2820	-.2860	-.2830
135.UUU	-.2920	-.2830	-.2860
180.UUU	-.2830	-.2800	-.2860
225.UUU	-.2830	-.2810	-.2830
270.UUU	-.2800	-.2830	-.2870

MACH (1) = .598 BETA (2) = -3.96U

X/LNP	.250	.500	.750
PHI			
.UUU	-.2730	-.2670	
90.UUU	-.2660	-.2670	-.2660
135.UUU	-.2660	-.2680	-.2720
180.UUU	-.2660	-.2660	-.2680
225.UUU	-.2720	-.2680	-.2700
270.UUU	-.2650	-.2680	-.2690

MACH (1) = .597 BETA (3) = .U80

X/LNP	.250	.500	.750
PHI			
.UUU	-.2730	-.2700	
90.UUU	-.2670	-.2700	-.2680
135.UUU	-.2740	-.2690	-.2670
180.UUU	-.2660	-.2700	-.2720
225.UUU	-.2700	-.2660	-.2650
270.UUU	-.2670	-.2680	-.2670

MACH (1) = .597 BETA (4) = 4.19U

X/LNP	.250	.500	.750
PHI			
.UUU	-.2720	-.2650	
90.UUU	-.2670	-.2670	-.2610
135.UUU	-.2680	-.2600	-.2620
180.UUU	-.2640	-.2660	-.2650
225.UUU	-.2690	-.2660	-.2630
270.UUU	-.2640	-.2690	-.2650

MACH (1) = .598 BETA (5) = 8.3UU

X/LNP	.250	.500	.750
PHI			
.UUU	-.2800	-.2780	
90.UUU	-.2710	-.2760	-.2750
135.UUU	-.2780	-.2800	-.2740
180.UUU	-.2740	-.2810	-.2830
225.UUU	-.2830	-.2800	-.2800

AMES 11-7x7 OA12 OEA UPPER MPS NOZZLE (RBPD38)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (5) = 0.300

X/LNP	.250	.500	.750
PHI			
270.000	-.2760	-.2830	-.2890

MACH (2) = .901 BETA (1) = -8.080

X/LNP	.250	.500	.750
PHI			
.000	-.2920	-.2870	
90.000	-.2820	-.2900	-.2950
135.000	-.2880	-.2920	-.2940
180.000	-.2910	-.2950	-.2980
225.000	-.2850	-.2910	-.2960
270.000	-.2870	-.2930	-.2920

MACH (2) = .899 BETA (2) = -3.990

X/LNP	.250	.500	.750
PHI			
.000	-.2820	-.2730	
90.000	-.2800	-.2790	-.2820
135.000	-.2810	-.2790	-.2840
180.000	-.2760	-.2800	-.2870
225.000	-.2740	-.2790	-.2880
270.000	-.2740	-.2820	-.2850

MACH (2) = .901 BETA (3) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.2770	-.2760	
90.000	-.2690	-.2770	-.2850
135.000	-.2730	-.2810	-.2850
180.000	-.2670	-.2800	-.2860
225.000	-.2690	-.2760	-.2850
270.000	-.2740	-.2800	-.2800

MACH (2) = .900 BETA (4) = 4.220

X/LNP	.250	.500	.750
PHI			
.000	-.2810	-.2720	
90.000	-.2730	-.2730	-.2780
135.000	-.2700	-.2750	-.2830
180.000	-.2710	-.2780	-.2850
225.000	-.2820	-.2730	-.2870
270.000	-.2810	-.2800	-.2760

MACH (2) = .899 BETA (5) = 0.360

X/LNP	.250	.500	.750
PHI			
.000	-.3080	-.2960	
90.000	-.2950	-.2930	-.2870
135.000	-.2950	-.2860	-.2850
180.000	-.2890	-.2870	-.2930
225.000	-.2940	-.2780	-.2790

AMES 11-7U7 OA12 O2A UPPER MPS NOZZLE (RBFD38)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .899 BETA (5) = 0.36U

X/LNP	.25U	.5UU	.75U
PHI			
27U.UU	-.281U	-.28UU	-.281U

AMES 11-7U7 OA12 O2A UPPER MPS NOZZLE (RBPD39) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

BETA = .000 RUDDER = .000
ELEVON = .000 FLAPLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 1.099 ALPHA (1) = -4.550

X/LNP	.250	.500	.750
PHI			
.000	-.2130	-.1870	
90.000	-.1870	-.1890	-.1870
135.000	-.1940	-.1920	-.1840
180.000	-.1900	-.1860	-.1910
225.000	-.1870	-.1850	-.1860
270.000	-.1880	-.1900	-.1850

MACH (1) = 1.100 ALPHA (2) = -3.520

X/LNP	.250	.500	.750
PHI			
.000	-.2090	-.1850	
90.000	-.1880	-.1910	-.1840
135.000	-.1910	-.1900	-.1850
180.000	-.1850	-.1840	-.1880
225.000	-.1860	-.1850	-.1810
270.000	-.1850	-.1850	-.1840

MACH (1) = 1.100 ALPHA (3) = -1.490

X/LNP	.250	.500	.750
PHI			
.000	-.2080	-.1860	
90.000	-.1850	-.1860	-.1840
135.000	-.1900	-.1880	-.1820
180.000	-.1850	-.1840	-.1900
225.000	-.1840	-.1840	-.1860
270.000	-.1870	-.1860	-.1830

MACH (1) = 1.098 ALPHA (4) = .540

X/LNP	.250	.500	.750
PHI			
.000	-.2120	-.1880	
90.000	-.1890	-.1920	-.1880
135.000	-.1930	-.1930	-.1870
180.000	-.1860	-.1860	-.1930
225.000	-.1870	-.1890	-.1880
270.000	-.1880	-.1880	-.1860

MACH (1) = 1.100 ALPHA (5) = 2.510

X/LNP	.250	.500	.750
PHI			
.000	-.2170	-.1940	
90.000	-.1960	-.1950	-.1950
135.000	-.1990	-.1980	-.1940
180.000	-.1930	-.1940	-.1960
225.000	-.1940	-.1920	-.1940

AMES 11-7U7 OA12 OEA UPPER MPS NOZZLE (RBFD39)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 1.1[illegible] ALPHA (5) = 2.51[illegible]

X/LNP	.25[illegible]	.5[illegible]	.75[illegible]
PHI			
27[illegible].[illegible]	-.193[illegible]	-.194[illegible]	-.192[illegible]

MACH (1) = 1.099 ALPHA (6) = 4.05[illegible]

X/LNP	.25[illegible]	.5[illegible]	.75[illegible]
PHI			
.[illegible]	-.219[illegible]	-.194[illegible]	
9[illegible].[illegible]	-.198[illegible]	-.198[illegible]	-.196[illegible]
135.[illegible]	-.201[illegible]	-.201[illegible]	-.196[illegible]
18[illegible].[illegible]	-.196[illegible]	-.198[illegible]	-.199[illegible]
225.[illegible]	-.194[illegible]	-.197[illegible]	-.194[illegible]
27[illegible].[illegible]	-.196[illegible]	-.197[illegible]	-.194[illegible]

MACH (1) = 1.1[illegible] ALPHA (7) = 6.63[illegible]

X/LNP	.25[illegible]	.5[illegible]	.75[illegible]
PHI			
.[illegible]	-.230[illegible]	-.206[illegible]	
9[illegible].[illegible]	-.211[illegible]	-.211[illegible]	-.208[illegible]
135.[illegible]	-.212[illegible]	-.212[illegible]	-.207[illegible]
18[illegible].[illegible]	-.206[illegible]	-.212[illegible]	-.209[illegible]
225.[illegible]	-.207[illegible]	-.208[illegible]	-.207[illegible]
27[illegible].[illegible]	-.206[illegible]	-.206[illegible]	-.206[illegible]

MACH (1) = 1.10[illegible] ALPHA (8) = 8.59[illegible]

X/LNP	.25[illegible]	.5[illegible]	.75[illegible]
PHI			
.[illegible]	-.237[illegible]	-.214[illegible]	
9[illegible].[illegible]	-.217[illegible]	-.218[illegible]	-.214[illegible]
135.[illegible]	-.224[illegible]	-.223[illegible]	-.217[illegible]
18[illegible].[illegible]	-.214[illegible]	-.216[illegible]	-.219[illegible]
225.[illegible]	-.214[illegible]	-.215[illegible]	-.212[illegible]
27[illegible].[illegible]	-.216[illegible]	-.215[illegible]	-.217[illegible]

MACH (1) = 1.099 ALPHA (9) = 9.97[illegible]

X/LNP	.25[illegible]	.5[illegible]	.75[illegible]
PHI			
.[illegible]	-.239[illegible]	-.219[illegible]	
9[illegible].[illegible]	-.217[illegible]	-.218[illegible]	-.214[illegible]
135.[illegible]	-.224[illegible]	-.224[illegible]	-.214[illegible]
18[illegible].[illegible]	-.217[illegible]	-.216[illegible]	-.221[illegible]
225.[illegible]	-.216[illegible]	-.215[illegible]	-.218[illegible]
27[illegible].[illegible]	-.223[illegible]	-.214[illegible]	-.217[illegible]

MACH (1) = 1.101 ALPHA (10) = 14.97[illegible]

X/LNP	.25[illegible]	.5[illegible]	.75[illegible]
PHI			
.[illegible]	-.266[illegible]	-.242[illegible]	
9[illegible].[illegible]	-.245[illegible]	-.245[illegible]	-.246[illegible]
135.[illegible]	-.251[illegible]	-.245[illegible]	-.244[illegible]
18[illegible].[illegible]	-.243[illegible]	-.246[illegible]	-.249[illegible]
225.[illegible]	-.243[illegible]	-.246[illegible]	-.245[illegible]

AMES 11-7U7 OA12 O2A UPPER MPS NOZZLE (RBPD39)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 1.101 ALPHA (1U) = 14.97U

X/LNP	.25U	.5UU	.75U
PHI			
27U.UUU	-.2430	-.2470	-.2460

MACH (2) = 1.247 ALPHA (1) = -4.44U

X/LNP	.25U	.5UU	.75U
PHI			
.UUU	-.184U	-.159U	
9U.UUU	-.159U	-.158U	-.162U
135.UUU	-.163U	-.163U	-.159U
18U.UUU	-.158U	-.158U	-.164U
225.UUU	-.159U	-.16UU	-.156U
27U.UUU	-.159U	-.16UU	-.158U

MACH (2) = 1.248 ALPHA (2) = -3.47U

X/LNP	.25U	.5UU	.75U
PHI			
.UUU	-.183U	-.156U	
9U.UUU	-.157U	-.157U	-.159U
135.UUU	-.161U	-.161U	-.16UU
18U.UUU	-.157U	-.158U	-.165U
225.UUU	-.156U	-.159U	-.158U
27U.UUU	-.156U	-.159U	-.159U

MACH (2) = 1.247 ALPHA (3) = -1.47U

X/LNP	.25U	.5UU	.75U
PHI			
.UUU	-.187U	-.155U	
9U.UUU	-.161U	-.156U	-.158U
135.UUU	-.163U	-.161U	-.157U
18U.UUU	-.16UU	-.156U	-.161U
225.UUU	-.158U	-.158U	-.158U
27U.UUU	-.159U	-.158U	-.156U

MACH (2) = 1.248 ALPHA (4) = .52U

X/LNP	.25U	.5UU	.75U
PHI			
.UUU	-.188U	-.167U	
9U.UUU	-.166U	-.17UU	-.164U
135.UUU	-.169U	-.171U	-.154U
18U.UUU	-.166U	-.166U	-.169U
225.UUU	-.163U	-.162U	-.164U
27U.UUU	-.164U	-.163U	-.166U

MACH (2) = 1.25U ALPHA (5) = 2.58U

X/LNP	.25U	.5UU	.75U
PHI			
.UUU	-.2UUU	-.173U	
9U.UUU	-.176U	-.177U	-.175U
135.UUU	-.175U	-.18UU	-.171U
18U.UUU	-.172U	-.175U	-.177U
225.UUU	-.172U	-.172U	-.172U

AMES 11-7ft OA12 02A UPPER MPS NOZZLE (RBPD39)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 1.250 ALPHA (5) = 2.580

X/LNP	.250	.500	.750
PHI			
270.000	-.1730	-.1720	-.1730

MACH (2) = 1.248 ALPHA (6) = 4.570

X/LNP	.250	.500	.750
PHI			
.000	-.2070	-.1830	
90.000	-.1820	-.1850	-.1820
135.000	-.1820	-.1880	-.1800
180.000	-.1800	-.1830	-.1860
225.000	-.1800	-.1820	-.1820
270.000	-.1810	-.1820	-.1810

MACH (2) = 1.248 ALPHA (7) = 6.670

X/LNP	.250	.500	.750
PHI			
.000	-.2180	-.1930	
90.000	-.1940	-.1970	-.1960
135.000	-.1960	-.2000	-.1960
180.000	-.1910	-.1970	-.2000
225.000	-.1970	-.1950	-.1920
270.000	-.1970	-.1960	-.1950

MACH (2) = 1.249 ALPHA (8) = 8.660

X/LNP	.250	.500	.750
PHI			
.000	-.2340	-.2110	
90.000	-.2120	-.2110	-.2110
135.000	-.2140	-.2120	-.2110
180.000	-.2090	-.2090	-.2140
225.000	-.2090	-.2110	-.2110
270.000	-.2110	-.2100	-.2070

MACH (2) = 1.246 ALPHA (9) = 10.030

X/LNP	.250	.500	.750
PHI			
.000	-.2390	-.2180	
90.000	-.2170	-.2210	-.2200
135.000	-.2180	-.2210	-.2180
180.000	-.2170	-.2190	-.2220
225.000	-.2190	-.2200	-.2170
270.000	-.2190	-.2200	-.2190

MACH (2) = 1.244 ALPHA (10) = 14.980

X/LNP	.250	.500	.750
PHI			
.000	-.2690	-.2500	
90.000	-.2500	-.2510	-.2510
135.000	-.2540	-.2540	-.2510
180.000	-.2520	-.2480	-.2550
225.000	-.2490	-.2490	-.2510

AMES 11-7U7 OA12 O2A UPPER MPS NOZZLE (RBPD39)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 1.244 ALPHA (10) = 14.980

X/LNP	.250	.500	.750
PHI			
270.000	-.2510	-.2480	-.2500

MACH (3) = 1.398 ALPHA (1) = -4.420

X/LNP	.250	.500	.750
PHI			
.000	-.1540	-.1440	
90.000	-.1450	-.1470	-.1460
135.000	-.1460	-.1480	-.1460
180.000	-.1430	-.1470	-.1490
225.000	-.1430	-.1460	-.1440
270.000	-.1430	-.1470	-.1430

MACH (3) = 1.395 ALPHA (2) = -3.420

X/LNP	.250	.500	.750
PHI			
.000	-.1590	-.1440	
90.000	-.1450	-.1450	-.1440
135.000	-.1480	-.1470	-.1430
180.000	-.1430	-.1430	-.1470
225.000	-.1430	-.1430	-.1430
270.000	-.1430	-.1450	-.1430

MACH (3) = 1.398 ALPHA (3) = -1.430

X/LNP	.25.	.500	.750
PHI			
.000	-.1580	-.1400	
90.000	-.1420	-.1430	-.1400
135.000	-.1430	-.1450	-.1390
180.000	-.1400	-.1410	-.1410
225.000	-.1400	-.1410	-.1390
270.000	-.1400	-.1440	-.1400

MACH (3) = 1.397 ALPHA (4) = .520

X/LNP	.250	.500	.750
PHI			
.000	-.1600	-.1420	
90.000	-.1440	-.1450	-.1440
135.000	-.1460	-.1470	-.1430
180.000	-.1420	-.1440	-.1430
225.000	-.1430	-.1430	-.1430
270.000	-.1430	-.1440	-.1420

MACH (3) = 1.396 ALPHA (5) = 2.600

X/LNP	.250	.500	.750
PHI			
.000	-.1670	-.1500	
90.000	-.1520	-.1530	-.1510
135.000	-.1530	-.1550	-.1500
180.000	-.1510	-.1510	-.1510
225.000	-.1500	-.1510	-.1500

AMES 11-707 OA12 O2A UPPER MPS NOZZLE (RBPD39)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 1.396 ALPHA (5) = 2.680

X/LNP	.250	.500	.750
PHI			
270.000	-.1500	-.1510	-.1500

MACH (3) = 1.397 ALPHA (6) = 4.570

X/LNP	.250	.500	.750
PHI			
.000	-.1790	-.1610	
90.000	-.1640	-.1650	-.1630
135.000	-.1660	-.1680	-.1610
180.000	-.1620	-.1640	-.1650
225.000	-.1620	-.1630	-.1630
270.000	-.1620	-.1630	-.1620

MACH (3) = 1.399 ALPHA (7) = 6.440

X/LNP	.250	.500	.750
PHI			
.000	-.1880	-.1720	
90.000	-.1730	-.1730	-.1720
135.000	-.1760	-.1770	-.1730
180.000	-.1730	-.1730	-.1730
225.000	-.1730	-.1720	-.1730
270.000	-.1730	-.1710	-.1710

MACH (3) = 1.398 ALPHA (8) = 8.710

X/LNP	.250	.500	.750
PHI			
.000	-.2050	-.1910	
90.000	-.1920	-.1930	-.1920
135.000	-.1940	-.1950	-.1910
180.000	-.1910	-.1920	-.1910
225.000	-.1910	-.1910	-.1920
270.000	-.1900	-.1910	-.1910

MACH (3) = 1.397 ALPHA (9) = 10.110

X/LNP	.250	.500	.750
PHI			
.000	-.2140	-.1990	
90.000	-.2010	-.2020	-.2000
135.000	-.2020	-.2040	-.1990
180.000	-.2010	-.2000	-.2000
225.000	-.2000	-.1990	-.1990
270.000	-.2000	-.1990	-.1980

MACH (3) = 1.394 ALPHA (10) = 15.030

X/LNP	.250	.500	.750
PHI			
.000	-.2310	-.2170	
90.000	-.2190	-.2200	-.2190
135.000	-.2200	-.2210	-.2180
180.000	-.2180	-.2180	-.2230
225.000	-.2180	-.2170	-.2180

AMES 11-7U7 OA12 O2A UPPER MPS NOZZLE (RBPD39)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 1.394 ALPHA (10) = 15.[illegible]

X/LNP	.250	.500	.750
PHI			
270.000	-.2170	-.2170	-.2180

AMES 11-7U7 OA12 O2A UPPER MPS NOZZLE (RBPD40) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = .500 RUDDER = .000
ELEVON = .000 RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 1.099 BETA (1) = -8.080

X/LNP	.250	.500	.750
PHI			
.000	-.2320	-.2150	
90.000	-.2140	-.2180	-.2160
135.000	-.2160	-.2190	-.2150
180.000	-.2120	-.2140	-.2180
225.000	-.2150	-.2130	-.2110
270.000	-.2150	-.2140	-.2110

MACH (1) = 1.101 BETA (2) = -4.000

X/LNP	.250	.500	.750
PHI			
.000	-.2170	-.1970	
90.000	-.2040	-.2000	-.1990
135.000	-.2040	-.2030	-.1990
180.000	-.1990	-.1970	-.2010
225.000	-.1990	-.1950	-.2000
270.000	-.1970	-.1950	-.1980

MACH (1) = 1.100 BETA (3) = -1.960

X/LNP	.250	.500	.750
PHI			
.000	-.2090	-.1940	
90.000	-.1920	-.1920	-.1930
135.000	-.1990	-.1960	-.1940
180.000	-.1920	-.1930	-.1960
225.000	-.1910	-.1940	-.1890
270.000	-.1940	-.1940	-.1870

MACH (1) = 1.099 BETA (4) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.2050	-.1850	
90.000	-.1880	-.1880	-.1890
135.000	-.1920	-.1920	-.1880
180.000	-.1880	-.1850	-.1930
225.000	-.1860	-.1860	-.1860
270.000	-.1850	-.1860	-.1840

MACH (1) = 1.099 BETA (5) = 2.150

X/LNP	.250	.500	.750
PHI			
.000	-.2010	-.1870	
90.000	-.1870	-.1910	-.1870
135.000	-.1940	-.1950	-.1870
180.000	-.1870	-.1890	-.1880
225.000	-.1850	-.1860	-.1880

AMES 11-7D7 OA12 O2A UPPER MPS NOZZLE (RBPD40)

SECTION ' 1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 1.099 BETA (5) = 2.150

X/LNP	.250	.500	.750
PHI			
270.000	-.1850	-.1870	-.1860

MACH (1) = 1.100 BETA (6) = 4.230

X/LNP	.250	.500	.750
PHI			
.000	-.1990	-.1800	
90.000	-.1850	-.1840	-.1810
135.000	-.1900	-.1860	-.1810
180.000	-.1820	-.1810	-.1830
225.000	-.1800	-.1820	-.1810
270.000	-.1810	-.1820	-.1820

MACH (1) = 1.099 BETA (7) = 8.390

X/LNP	.250	.500	.750
PHI			
.000	-.2160	-.1910	
90.000	-.1970	-.1980	-.1960
135.000	-.2010	-.1990	-.1940
180.000	-.1940	-.1940	-.1970
225.000	-.1970	-.1950	-.1930
270.000	-.1940	-.1940	-.1930

MACH (2) = 1.250 BETA (1) = -8.040

X/LNP	.250	.500	.750
PHI			
.000	-.2220	-.1960	
90.000	-.1990	-.1970	-.1960
135.000	-.2100	-.2010	-.1960
180.000	-.1950	-.1970	-.2020
225.000	-.1960	-.1950	-.1940
270.000	-.1990	-.1960	-.1960

MACH (2) = 1.247 BETA (2) = -3.970

X/LNP	.250	.500	.750
PHI			
.000	-.2030	-.1780	
90.000	-.1780	-.1830	-.1790
135.000	-.1830	-.1830	-.1770
180.000	-.1790	-.1800	-.1820
225.000	-.1790	-.1790	-.1780
270.000	-.1790	-.1780	-.1770

MACH (2) = 1.247 BETA (3) = -1.940

X/LNP	.250	.500	.750
PHI			
.000	-.1950	-.1710	
90.000	-.1700	-.1730	-.1690
135.000	-.1740	-.1760	-.1670
180.000	-.1710	-.1700	-.1740
225.000	-.1690	-.1710	-.1710

AMES 11-7?7 OA12 O2A UPPER MPS NOZZLE (RBPD40)

SECTION ' 1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 1.247 BETA (3) = -1.940

X/LNP	.250	.500	.750
PHI			
270.000	-.1680	-.1710	-.1690

MACH (2) = 1.246 BETA (4) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1920	-.1660	
90.000	-.1680	-.1690	-.1650
135.000	-.1680	-.1710	-.1660
180.000	-.1670	-.1660	-.1730
225.000	-.1670	-.1630	-.1660
270.000	-.1690	-.1630	-.1650

MACH (2) = 1.245 BETA (5) = 2.140

X/LNP	.250	.500	.750
PHI			
.000	-.1920	-.1650	
90.000	-.1660	-.1670	-.1640
135.000	-.1680	-.1700	-.1640
180.000	-.1640	-.1630	-.1680
225.000	-.1630	-.1640	-.1630
270.000	-.1640	-.1630	-.1640

MACH (2) = 1.245 BETA (6) = 4.210

X/LNP	.250	.500	.750
PHI			
.000	-.1950	-.1650	
90.000	-.1680	-.1680	-.1670
135.000	-.1720	-.1730	-.1680
180.000	-.1650	-.1680	-.1740
225.000	-.1650	-.1670	-.1670
270.000	-.1680	-.1680	-.1670

MACH (2) = 1.247 BETA (7) = 8.340

X/LNP	.250	.500	.750
PHI			
.000	-.2060	-.1760	
90.000	-.1800	-.1840	-.1750
135.000	-.1810	-.1800	-.1740
180.000	-.1750	-.1770	-.1780
225.000	-.1770	-.1750	-.1760
270.000	-.1770	-.1750	-.1750

MACH (3) = 1.396 BETA (1) = -8.040

X/LNP	.250	.500	.750
PHI			
.000	-.1950	-.1770	
90.000	-.1770	-.1790	-.1770
135.000	-.1790	-.1810	-.1760
180.000	-.1760	-.1770	-.1820
225.000	-.1760	-.1770	-.1750

AMES 11-7U7 OA12 O2A UPPER MPS NOZZLE (RBFD4U)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 1.396 BETA (1) = -0.040

X/LNP	.250	.500	.750
PHI			
270.000	-.1770	-.1770	-.1750

MACH (3) = 1.399 BETA (2) = -3.970

X/LNP	.250	.500	.750
PHI			
.000	-.1740	-.1540	
90.000	-.1550	-.1570	-.1550
135.000	-.1580	-.1600	-.1550
180.000	-.1540	-.1550	-.1590
225.000	-.1540	-.1550	-.1530
270.000	-.1540	-.1550	-.1540

MACH (3) = 1.397 BETA (3) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1590	-.1400	
90.000	-.1420	-.1430	-.1410
135.000	-.1430	-.1460	-.1400
180.000	-.1400	-.1410	-.1460
225.000	-.1400	-.1400	-.1400
270.000	-.1410	-.1410	-.1400

MACH (3) = 1.394 BETA (4) = 4.210

X/LNP	.250	.500	.750
PHI			
.000	-.1670	-.1430	
90.000	-.1450	-.1460	-.1440
135.000	-.1490	-.1500	-.1440
180.000	-.1440	-.1450	-.1490
225.000	-.1450	-.1440	-.1440
270.000	-.1440	-.1440	-.1430

MACH (3) = 1.392 BETA (5) = 8.360

X/LNP	.250	.500	.750
PHI			
.000	-.1820	-.1570	
90.000	-.1600	-.1600	-.1580
135.000	-.1600	-.1620	-.1570
180.000	-.1560	-.1570	-.1610
225.000	-.1570	-.1560	-.1570
270.000	-.1580	-.1560	-.1570

AMES 11-7U7 OA12 02A UPPER MPS NOZZLE (RBPD41) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = -4.000 RUDDER = -10.000
ELEVON = .000 RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -4.910

X/LNP	.250	.500	.750
PHI			
.000	-.1650	-.1560	
90.000	-.1580	-.1570	-.1610
135.000	-.1620	-.1590	-.1610
180.000	-.1570	-.1580	-.1620
225.000	-.1580	-.1550	-.1590
270.000	-.1570	-.1570	-.1560

MACH (1) = .598 BETA (2) = .090

X/LNP	.250	.500	.750
PHI			
.000	-.1560	-.1520	
90.000	-.1520	-.1520	-.1560
135.000	-.1570	-.1560	-.1540
180.000	-.1490	-.1530	-.1580
225.000	-.1480	-.1550	-.1590
270.000	-.1520	-.1570	-.1570

MACH (1) = .600 BETA (3) = 5.280

X/LNP	.250	.500	.750
PHI			
.000	-.1700	-.1570	
90.000	-.1600	-.1630	-.1630
135.000	-.1670	-.1650	-.1610
180.000	-.1580	-.1610	-.1650
225.000	-.1630	-.1640	-.1600
270.000	-.1630	-.1690	-.1590

MACH (2) = .900 BETA (1) = -4.990

X/LNP	.250	.500	.750
PHI			
.000	-.1850	-.1780	
90.000	-.1770	-.1780	-.1780
135.000	-.1871	-.1820	-.1750
180.000	-.1760	-.1760	-.1790
225.000	-.1760	-.1790	-.1780
270.000	-.1730	-.1850	-.1780

MACH (2) = .900 BETA (2) = .090

X/LNP	.250	.500	.750
PHI			
.000	-.1780	-.1780	
90.000	-.1710	-.1770	-.1680
135.000	-.1830	-.1750	-.1690
180.000	-.1730	-.1730	-.1760
225.000	-.1760	-.1730	-.1700

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBFD41)

AMES 11-7U7 OA12 O2A UPPER MPS NOZZLE

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .900 BETA (2) = .U9U

X/LNP	.250	.500	.750
PHI			
270.000	-.1770	-.1740	-.1720

MACH (2) = .901 BETA (3) = 5.360

X/LNP	.250	.500	.750
PHI			
.000	-.1830	-.1730	
90.000	-.1760	-.1770	-.1740
135.000	-.1910	-.1760	-.1690
180.000	-.1760	-.1700	-.1770
225.000	-.1760	-.1770	-.1790
270.000	-.1770	-.1740	-.1760

AMES 11-7X7 OA12 O2A UPPER MPS NOZZLE (RBPD42) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0350 SCALE

PARAMETRIC DATA

ALPHA = -4.000 RUDDER = -20.000
ELEVON = .000 RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .596 BETA (1) = -4.900

X/LNP	.250	.500	.750
PHI			
.000	-.1810	-.1660	
90.000	-.1630	-.1670	-.1680
135.000	-.1780	-.1640	-.1650
180.000	-.1660	-.1650	-.1650
225.000	-.1620	-.1640	-.1660
270.000	-.1620	-.1680	-.1640

MACH (1) = .596 BETA (2) = .100

X/LNP	.250	.500	.750
PHI			
.000	-.1680	-.1610	
90.000	-.1620	-.1600	-.1590
135.000	-.1700	-.1590	-.1630
180.000	-.1590	-.1610	-.1630
225.000	-.1640	-.1600	-.1560
270.000	-.1580	-.1630	-.1590

MACH (1) = .598 BETA (3) = 5.290

X/LNP	.250	.500	.750
PHI			
.000	-.1830	-.1680	
90.000	-.1720	-.1690	-.1740
135.000	-.1820	-.1710	-.1660
180.000	-.1700	-.1700	-.1710
225.000	-.1720	-.1760	-.1670
270.000	-.1700	-.1730	-.1660

MACH (2) = .904 BETA (1) = -4.980

X/LNP	.250	.500	.750
PHI			
.000	-.1850	-.1810	
90.000	-.1860	-.1830	-.1820
135.000	-.1890	-.1810	-.1820
180.000	-.1790	-.1830	-.1910
225.000	-.1870	-.1830	-.1890
270.000	-.1810	-.1810	-.1890

MACH (2) = .900 BETA (2) = .100

X/LNP	.250	.500	.750
PHI			
.000	-.1790	-.1800	
90.000	-.1850	-.1810	-.1770
135.000	-.1950	-.1820	-.1770
180.000	-.1780	-.1760	-.1830
225.000	-.1780	-.1820	-.1790

AMES 11-7U7 OA12 O2A UPPER MPS NOZZLE (RBPD42)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .9UU BETA (2) = .10U

X/LNP	.25U	.5UU	.75U
PHI			
27U.UUU	-.185U	-.18UU	-.179U

MACH (2) = .9U1 BETA (3) = 5.36U

X/LNP	.25U	.5UU	.75U
PHI			
.UUU	-.193U	-.185U	
9U.UUU	-.186U	-.186U	-.185U
135.UUU	-.197U	-.192U	-.188U
18U.UUU	-.184U	-.191U	-.187U
225.UUU	-.184U	-.188U	-.184U
27U.UUU	-.188U	-.192U	-.183U

AMES 11-7U7 OA12 02A UPPER MPS NOZZLE (RBFD43) (31 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = -4.000 RUDDER = .000
ELEVON = 10.000 RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -4.910

X/LNP	.250	.500	.750
PHI			
.000	-.1980	-.1860	
90.000	-.1800	-.1870	-.1890
135.000	-.1950	-.1910	-.1880
180.000	-.1850	-.1900	-.1950
225.000	-.1850	-.1930	-.1940
270.000	-.1850	-.1930	-.1910

MACH (1) = .599 BETA (2) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1830	-.1710	
90.000	-.1700	-.1770	-.1780
135.000	-.1870	-.1750	-.1750
180.000	-.1700	-.1730	-.1800
225.000	-.1710	-.1750	-.1780
270.000	-.1740	-.1810	-.1740

MACH (1) = .597 BETA (3) = 5.270

X/LNP	.250	.500	.750
PHI			
.000	-.1870	-.1750	
90.000	-.1750	-.1750	-.1740
135.000	-.1900	-.1790	-.1740
180.000	-.1710	-.1750	-.1810
225.000	-.1710	-.1740	-.1770
270.000	-.1780	-.1770	-.1710

MACH (2) = .897 BETA (1) = -4.980

X/LNP	.250	.500	.750
PHI			
.000	-.2120	-.2080	
90.000	-.2100	-.2110	-.2060
135.000	-.2210	-.2120	-.2100
180.000	-.2080	-.2080	-.2080
225.000	-.2070	-.2100	-.2020
270.000	-.2070	-.2110	-.2060

MACH (2) = .896 BETA (2) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1750	-.1720	
90.000	-.1760	-.1740	-.1730
135.000	-.1860	-.1770	-.1760
180.000	-.1760	-.1750	-.1770
225.000	-.1740	-.1750	-.1770

AMES 11-7U? OA12 02A UPPER MPS NOZZLE (RBSD43)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .896 BETA (2) = .00

X/LNP	.25	.50	.75
PHI			
270.000	-.173	-.177	-.179

MACH (2) = .903 BETA (3) = 5.34

X/LNP	.25	.50	.75
PHI			
.000	-.188	-.186	
90.000	-.190	-.188	-.196
135.000	-.194	-.193	-.197
180.000	-.184	-.196	-.197
225.000	-.190	-.194	-.192
270.000	-.186	-.196	-.193

AMES 11-7X7 OA12 C2A UPPER MPS NOZZLE (RBPD44) (31 MAY 73)

REFERENCE DATA

SREF = 2.421 SQ.FT. XMRP = 28.539 INCHES
LREF = 39.849 INCHES YMRP = .000 INCHES
BREF = 39.849 INCHES ZMRP = .000 INCHES
SCALE = .034 SCALE

PARAMETRIC DATA

ALPHA = -4.000 RUDDER = .000
ELEVON = -10.000 RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .597 BETA (1) = -4.910

X/LNP	.25	.50	.75
PHI			
.000	-.152	-.141	
90.000	-.145	-.139	-.139
135.000	-.151	-.142	-.138
180.000	-.143	-.140	-.142
225.000	-.139	-.138	-.136
270.000	-.141	-.142	-.139

MACH (1) = .597 BETA (2) = .080

X/LNP	.25	.50	.75
PHI			
.000	-.151	-.135	
90.000	-.136	-.134	-.134
135.000	-.146	-.137	-.132
180.000	-.136	-.133	-.134
225.000	-.138	-.132	-.131
270.000	-.138	-.131	-.129

MACH (1) = .597 BETA (3) = 5.270

X/LNP	.25	.50	.75
PHI			
.000	-.142	-.127	
90.000	-.131	-.127	-.126
135.000	-.139	-.127	-.126
180.000	-.126	-.126	-.131
225.000	-.126	-.129	-.125
270.000	-.125	-.130	-.128

MACH (2) = .902 BETA (1) = -4.980

X/LNP	.25	.50	.75
PHI			
.000	-.165	-.168	
90.000	-.163	-.168	-.167
135.000	-.175	-.165	-.167
180.000	-.170	-.167	-.170
225.000	-.171	-.168	-.167
270.000	-.164	-.170	-.169

MACH (2) = .902 BETA (2) = .090

X/LNP	.25	.50	.75
PHI			
.000	-.153	-.160	
90.000	-.152	-.155	-.151
135.000	-.159	-.155	-.152
180.000	-.153	-.157	-.159
225.000	-.155	-.154	-.155

AMES 11-7X7 OA12 OPA UPPER MPS NOZZLE (RBPD44)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .9[illegible] BETA (2) = .[illegible]

X/LNP	.25[illegible]	.5[illegible]	.75[illegible]
PHI			
27[illegible].[illegible]	-.155[illegible]	-.153[illegible]	-.152[illegible]

MACH (2) = .9[illegible] BETA (3) = 5.34[illegible]

X/LNP	.25[illegible]	.5[illegible]	.75[illegible]
PHI			
.[illegible]	-.153[illegible]	-.159[illegible]	
9[illegible].[illegible]	-.154[illegible]	-.155[illegible]	-.155[illegible]
135.[illegible]	-.157[illegible]	-.157[illegible]	-.153[illegible]
18[illegible].[illegible]	-.153[illegible]	-.155[illegible]	-.152[illegible]
225.[illegible]	-.157[illegible]	-.152[illegible]	-.153[illegible]
27[illegible].[illegible]	-.158[illegible]	-.157[illegible]	-.156[illegible]

AMES 11-7X7 OA12 O2A UPPER MPS NOZZLE (RBPD45) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.53[illegible] INCHES
LREF = 39.849[illegible] INCHES YMRP = .[illegible] INCHES
BREF = 39.849[illegible] INCHES ZMRP = .[illegible] INCHES
SCALE = .[illegible] SCALE

PARAMETRIC DATA

ALPHA = -4.[illegible] RUDDER = [illegible]
ELEVON = .[illegible] RUDFLR = .[illegible]

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .601 BETA (1) = -4.910

X/LNP	.250	.500	.750
PHI			
.[illegible]	-.168[illegible]	-.158[illegible]	
90.[illegible]	-.161[illegible]	-.158[illegible]	-.161[illegible]
135.[illegible]	-.169[illegible]	-.161[illegible]	-.160[illegible]
180.[illegible]	-.163[illegible]	-.159[illegible]	-.162[illegible]
225.[illegible]	-.159[illegible]	-.162[illegible]	-.161[illegible]
270.[illegible]	-.158[illegible]	-.165[illegible]	-.163[illegible]

MACH (1) = .597 BETA (2) = .090

X/LNP	.250	.500	.750
PHI			
.[illegible]	-.150[illegible]	-.143[illegible]	
90.[illegible]	-.143[illegible]	-.152[illegible]	-.143[illegible]
135.[illegible]	-.153[illegible]	-.144[illegible]	-.148[illegible]
180.[illegible]	-.148[illegible]	-.145[illegible]	-.149[illegible]
225.[illegible]	-.148[illegible]	-.143[illegible]	-.145[illegible]
270.[illegible]	-.143[illegible]	-.152[illegible]	-.143[illegible]

MACH (1) = .998 BETA (3) = 5.280

X/LNP	.250	.500	.750
PHI			
.[illegible]	-.157[illegible]	-.149[illegible]	
90.[illegible]	-.152[illegible]	-.147[illegible]	-.150[illegible]
135.[illegible]	-.156[illegible]	-.149[illegible]	-.153[illegible]
180.[illegible]	-.151[illegible]	-.151[illegible]	-.156[illegible]
225.[illegible]	-.148[illegible]	-.155[illegible]	-.151[illegible]
270.[illegible]	-.151[illegible]	-.154[illegible]	-.152[illegible]

MACH (2) = .901 BETA (1) = -5.000

X/LNP	.250	.500	.750
PHI			
.[illegible]	-.191[illegible]	-.192[illegible]	
90.[illegible]	-.187[illegible]	-.193[illegible]	-.191[illegible]
135.[illegible]	-.193[illegible]	-.189[illegible]	-.190[illegible]
180.[illegible]	-.185[illegible]	-.185[illegible]	-.191[illegible]
225.[illegible]	-.190[illegible]	-.188[illegible]	-.[illegible]80
270.[illegible]	-.193[illegible]	-.188[illegible]	-.188[illegible]

MACH (2) = .902 BETA (2) = .090

X/LNP	.250	.500	.750
PHI			
.[illegible]	-.177[illegible]	-.178[illegible]	
90.[illegible]	-.173[illegible]	-.176[illegible]	-.180[illegible]
135.[illegible]	-.179[illegible]	-.172[illegible]	-.178[illegible]
180.[illegible]	-.174[illegible]	-.171[illegible]	-.178[illegible]
225.[illegible]	-.174[illegible]	-.177[illegible]	-.179[illegible]

AMES 11-7X7 OA12 OEA UPPER MPS NOZZLE (RBFD45)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .902 BETA (2) = .09

X/LNP	.25	.50	.75
PHI			
270.00	-.176	-.180	-.179

MACH (2) = .90 BETA (3) = 5.35

X/LNP	.25	.50	.75
PHI			
.00	-.170	-.173	
90.00	-.173	-.175	-.174
135.00	-.181	-.174	-.172
180.00	-.175	-.177	-.174
225.00	-.175	-.172	-.174
270.00	-.170	-.175	-.172

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPD40) (01 MAY 73)

AMES 11-7X7 OA12 OEA UPPER MPS NOZZLE

REFERENCE DATA

SREF = 2.421 SQ.FT. XMRP = 28.530 INCHES
LREF = 39.849 INCHES YMRP = .000 INCHES
BREF = 39.849 INCHES ZMRP = .000 INCHES
SCALE = .050 SCALE

PARAMETRIC DATA

BETA = .00 RUDDER = .00
ELEVON = .00 RUDFLR = .00

SECTION (1)MPS NOZZLE

DEPENDENT VARIABLE CP

MACH (1) = .60 ALPHA (1) =-15.85

X/LNP	.25	.50	.75
PHI			
.00	-.158	-.159	
90.00	-.159	-.157	-.160
135.00	-.157	-.159	-.159
180.00	-.154	-.160	-.165
225.00	-.155	-.157	-.163
270.00	-.158	-.159	-.161

MACH (1) = .599 ALPHA (2) =-10.49

X/LNP	.25	.50	.75
PHI			
.00	-.152	-.152	
90.00	-.148	-.152	-.154
135.00	-.149	-.154	-.157
180.00	-.154	-.156	-.165
225.00	-.154	-.153	-.154
270.00	-.148	-.155	-.153

MACH (1) = .599 ALPHA (3) = -5.20

X/LNP	.25	.50	.75
PHI			
.00	-.146	-.145	
90.00	-.143	-.144	-.146
135.00	-.146	-.143	-.148
180.00	-.145	-.146	-.154
225.00	-.144	-.148	-.148
270.00	-.144	-.149	-.146

MACH (1) = .599 ALPHA (4) = .05

X/LNP	.25	.50	.75
PHI			
.00	-.140	-.140	
90.00	-.142	-.143	-.145
135.00	-.140	-.140	-.141
180.00	-.137	-.139	-.147
225.00	-.140	-.139	-.143
270.00	-.142	-.148	-.142

MACH (2) = .900 ALPHA (1) =-16.39

X/LNP	.25	.50	.75
PHI			
.00	-.175	-.174	
90.00	-.175	-.177	-.170
135.00	-.178	-.175	-.173
180.00	-.173	-.176	-.191
225.00	-.175	-.175	-.172

AMES 11-7x7 OA12 02A UPPER MPS NOZZLE (RBFD46)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .9xx ALPHA (1) =-16.39x

X/LNP	.25x	.5xx	.75x
PHI			
27x.xxx	-.178x	-.175x	-.172x

MACH (2) = .9x1 ALPHA (2) =-10.84x

X/LNP	.25x	.5xx	.75x
PHI			
.xxx	-.187x	-.186x	
9x.xxx	-.189x	-.186x	-.181x
135.xxx	-.188x	-.185x	-.184x
18x.xxx	-.192x	-.187x	-.188x
225.xxx	-.192x	-.186x	-.184x
27x.xxx	-.183x	-.188x	-.184x

MACH (2) = .9xx ALPHA (3) = -5.38x

X/LNP	.25x	.5xx	.75x
PHI			
.xxx	-.169x	-.171x	
9x.xxx	-.168x	-.172x	-.178x
135.xxx	-.171x	-.175x	-.175x
18x.xxx	-.168x	-.171x	-.176x
225.xxx	-.172x	-.173x	-.169x
27x.xxx	-.17xx	-.173x	-.168x

MACH (2) = .9x2 ALPHA (4) = .0xx

X/LNP	.25x	.5xx	.75x
PHI			
.xxx	-.166x	-.169x	
9x.xxx	-.163x	-.165x	-.169x
135.xxx	-.167x	-.167x	-.164x
18x.xxx	-.165x	-.164x	-.162x
225.xxx	-.164x	-.164x	-.164x
27x.xxx	-.164x	-.167x	-.162x

AMES 11-7U7 OA12 OBA UPPER MPS NOZZLE (FBF047) (31 MAY 73)

REFERENCE DATA

SREF = 2.421U SQ.FT. YMRP = 28.53U0 INCHES
LREF = 39.849U INCHES YMRP = .UUU0 INCHES
BREF = 39.849U INCHES ZMRP = .UUU0 INCHES
SCALE = .U3U0 SCALE

PARAMETRIC DATA

ALPHA = -5.UU0 RUDDER = .UU0
ELEVON = .UU0 RUDFLR = .UU0

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) =-10.3U0

X/LNP	.25U	.5U0	.75U
PHI			
.UU0	-.167U	-.169U	
9U.UU0	-.173U	-.167U	-.171U
135.UU0	-.17?U	-.17U0	-.173U
18U.UU0	-.169U	-.174U	-.177U
225.UU0	-.171U	-.172U	-.169U
27U.UU0	-.165U	-.175U	-.166U

MACH (1) = .597 BETA (2) = -5.19U

X/LNP	.25U	.3U0	.75U
PHI			
.UU0	-.1?1U	-.15U0	
9U.UU0	-.15U0	-.148U	-.15U0
135.UU0	-.15U0	-.148U	-.149U
18U.UU0	-.15U0	-.151U	-.159U
225.UU0	-.153U	-.15U0	-.147U
27U.UU0	-.15U0	-.153U	-.15U0

MACH (1) = .597 BETA (3) = 5.UU0

X/LNP	.25U	.5U0	.75U
PHI			
.UU0	-.149U	-.152U	
9U.UU0	-.152U	-.152U	-.15U0
135.UU0	-.152U	-.153U	-.152U
18U.UU0	-.152U	-.147U	-.157U
225.UU0	-.152U	-.15U0	-.146U
27U.UU0	-.152U	-.155U	-.145U

MACH (1) = .599 BETA (4) = 10.08U

X/LNP	.25U	.5U0	.75U
PHI			
.UU0	-.164U	-.168U	
9U.UU0	-.164U	-.167U	-.165U
135.UU0	-.168U	-.168U	-.167U
18U.UU0	-.163U	-.168U	-.177U
225.UU0	-.168U	-.168U	-.164U
27U.UU0	-.162U	-.169U	-.167U

MACH (2) = .898 BETA (1) =-10.44U

X/LNP	.25U	.5U0	.75U
PHI			
.UU0	-.196U	-.195U	
9U.UU0	-.197U	-.196U	-.199U
135.UU0	-.198U	-.194U	-.198U
18U.UU0	-.197U	-.19U0	-.212U
225.UU0	-.195U	-.199U	-.198U

AMES 11-7U7 OA12 OPA UPPER MPS NOZZLE (RBPD47)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .898 BETA (1) =-10.44D

X/LNP	.25D	.5DD	.75D
PHI			
27D.DDD	-.199D	-.199D	-.198D

MACH (2) = .9D4 BETA (2) = -5.27D

X/LNP	.25D	.5DD	.75D
PHI			
.DDD	-.182D	-.181D	
9D.DDD	-.184D	-.181D	-.184D
135.DDD	-.185D	-.185D	-.185D
18D.DDD	-.185D	-.185D	-.197D
225.DDD	-.185D	-.184D	-.182D
27D.DDD	-.182D	-.182D	-.186D

MACH (2) = .9D2 BETA (3) = 5.07D

X/LNP	.25D	.5DD	.75D
PHI			
.DDD	-.169D	-.176D	
9D.DDD	-.163D	-.174D	-.179D
135.DDD	-.168D	-.174D	-.177D
18D.DDD	-.168D	-.171D	-.199D
225.DDD	-.174D	-.175D	-.179D
27D.DDD	-.176D	-.178D	-.174D

MACH (2) = .898 BETA (4) = 10.22D

X/LNP	.25D	.5DD	.75D
PHI			
.DDD	-.192D	-.193D	
9D.DDD	-.191D	-.191D	-.188D
135.DDD	-.189D	-.191D	-.189D
18D.DDD	-.185D	-.189D	-.2D9D
225.DDD	-.191D	-.191D	-.189D
27D.DDD	-.191D	-.195D	-.189D

AMES 11-7X7 OA12 OEA UPPER MPS NOZZLE (REFD48) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.53[illegible] INCHES
LREF = 39.849[illegible] INCHES YMRP = .[illegible] INCHES
BREF = 39.849[illegible] INCHES ZMRP = .[illegible] INCHES
SCALE = .[illegible] SCALE

PARAMETRIC DATA

ALPHA = -10.[illegible] RUDDER = .[illegible]
ELEVON = .[illegible] RUDFLR = [illegible]

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) =-10.280

X/LNP	.250	.500	.750
PHI			
.000	-.1670	-.1730	
90.000	-.1660	-.1660	-.1680
135.000	-.1670	-.1650	-.1670
180.000	-.1690	-.1670	-.1760
225.000	-.1710	-.1660	-.1660
270.000	-.1690	-.1690	-.1680

MACH (1) = .598 BETA (2) = -5.180

X/LNP	.250	.500	.750
PHI			
.000	-.1560	-.1550	
90.000	-.1530	-.1560	-.1530
135.000	-.1600	-.1530	-.1520
180.000	-.1560	-.1530	-.1630
225.000	-.1540	-.1530	-.1530
270.000	-.1560	-.1580	-.1510

MACH (1) = .597 BETA (3) = 5.020

X/LNP	.250	.500	.750
PHI			
.000	-.1530	-.1540	
90.000	-.1550	-.1560	-.1540
135.000	-.1580	-.1530	-.1530
180.000	-.1550	-.1570	-.1580
225.000	-.1540	-.1550	-.1510
270.000	-.1570	-.1550	-.1510

MACH (1) = .599 BETA (4) = 10.120

X/LNP	.250	.500	.750
PHI			
.000	-.1710	-.1670	
90.000	-.1680	-.1700	-.1720
135.000	-.1750	-.1710	-.1710
180.000	-.1740	-.1700	-.1780
225.000	-.1710	-.1720	-.1710
270.000	-.1700	-.1780	-.1740

MACH (2) = .962 BETA (1) =-10.460

X/LNP	.250	.500	.750
PHI			
.000	-.2020	-.2010	
90.000	-.1990	-.2000	-.2020
135.000	-.2020	-.2000	-.2010
180.000	-.1970	-.1960	-.2130
225.000	-.2040	-.1970	-.2010

AMES 11-7X7 OA12 OEA UPPER MPS NOZZLE (PBPD49)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .901 BETA (1) =-10.460

X/LNP	.250	.500	.750
PHI			
270.000	-.2080	-.2000	-.2000

MACH (2) = .898 BETA (2) = -5.270

X/LNP	.250	.500	.750
PHI			
.000	-.1870	-.1840	
90.000	-.1840	-.1820	-.1810
135.000	-.1880	-.1810	-.1870
180.000	-.1840	-.1810	-.2020
225.000	-.1760	-.1850	-.1880
270.000	-.1820	-.1850	-.1860

MACH (2) = .901 BETA (3) = 5.110

X/LNP	.250	.500	.750
PHI			
.000	-.1920	-.1920	
90.000	-.1870	-.1910	-.1820
135.000	-.1960	-.1890	-.1870
180.000	-.1870	-.1860	-.2020
225.000	-.1860	-.1870	-.1830
270.000	-.1920	-.1900	-.1860

MACH (2) = .900 BETA (4) = 10.300

X/LNP	.250	.500	.750
PHI			
.000	-.2020	-.1970	
90.000	-.1970	-.1980	-.1990
135.000	-.1980	-.1990	-.1980
180.000	-.1950	-.2000	-.2160
225.000	-.1960	-.1980	-.1990
270.000	-.1950	-.2030	-.1980

AMES 11-FT OA12 OPA OMS NOZZLE (RBPE01) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.530 INCHES
LREF = 39.849 INCHES YMRP = .000 INCHES
BREF = 39.849 INCHES ZMRP = .000 INCHES
SCALE = .030 SCALE

PARAMETRIC DATA

BETA = .00 RUDDER = .00
ELEVON = .00 RUDFLR = .00

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .60 ALPHA (1) = -4.41

X/LNM	.20	.40
PHI		
135.00	-.254	
180.00	-.156	-.196
225.00	-.200	

MACH (1) = .599 ALPHA (2) = .03

X/LNM	.20	.40
PHI		
135.00	-.189	
180.00	-.152	-.193
225.00	-.196	

MACH (1) = .60 ALPHA (3) = 5.03

X/LNM	.20	.40
PHI		
135.00	-.192	
180.00	-.155	-.182
225.00	-.194	

MACH (1) = .600 ALPHA (4) = 10.040

X/LNM	.20	.400
PHI		
135.00	-.191	
180.00	-.134	-.184
225.00	-.193	

MACH (1) = .598 ALPHA (5) = 15.020

X/LNM	.20	.400
PHI		
135.00	-.231	
180.00	-.223	-.243
225.00	-.251	

MACH (1) = .599 ALPHA (6) = 20.000

X/LNM	.20	.400
PHI		
135.00	-.254	
180.00	-.274	-.299
225.00	-.315	

MACH (1) = .597 ALPHA (7) = 22.580

X/LNM	.20	.400
PHI		
135.00	-.261	
180.00	-.262	-.329
225.00	-.345	

AMES 11 [illegible] OA12 O2A OMS NOZZLE (RBFEU1)

SECTION ' 1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .905 ALPHA (1) = -4.560

X/LNM	.200	.400
PHI		
135.000	-.2270	
180.000	-.2050	-.2360
225.000	-.2310	

MACH (2) = .901 ALPHA (2) = -.010

X/LNM	.200	.400
PHI		
135.000	-.2140	
180.000	-.1970	-.2180
225.000	-.2180	

MACH (2) = .904 ALPHA (3) = 4.980

X/LNM	.200	.400
PHI		
135.000	-.1970	
180.000	-.1720	-.1980
225.000	-.2070	

MACH (2) = .906 ALPHA (4) = 9.990

X/LNM	.200	.400
PHI		
135.000	-.2075	
180.000	-.1930	-.2150
225.000	-.2320	

MACH (2) = .901 ALPHA (5) = 14.990

X/LNM	.200	.400
PHI		
135.000	-.2380	
180.000	-.2640	-.2690
225.000	-.2760	

MACH (2) = .900 ALPHA (6) = 20.020

X/LNM	.200	.400
PHI		
135.000	-.2230	
180.000	-.3040	-.3330
225.000	-.3400	

MACH (2) = .902 ALPHA (7) = 25.040

X/LNM	.200	.400
PHI		
135.000	-.4840	
180.000	-.4510	-.5060
225.000	-.5260	

AMES 11-7X7 OA12 O2A OMS NOZZLE (RBPEU2) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.530[illegible] INCHES
LREF = 39.849[illegible] INCHES YMRP = .[illegible] INCHES
BREF = 39.849[illegible] INCHES ZMRP = .[illegible] INCHES
SCALE = .03[illegible] SCALE

PARAMETRIC DATA

ALPHA = .[illegible] RUDDER = .[illegible]
ELEVON = .[illegible] RUDFLR = .[illegible]

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) =-10.010

X/LNM	.200	.400
PHI		
135.000	-.1610	
180.000	-.1120	-.1860
225.000	-.1920	

MACH (1) = .598 BETA (2) = -4.960

X/LNM	.200	.400
PHI		
135.000	-.1760	
180.000	-.1130	-.1880
225.000	-.1850	

MACH (1) = .598 BETA (3) = 5.230

X/LNM	.200	.400
PHI		
135.000	-.2160	
180.000	-.1980	-.2090
225.000	-.2240	

MACH (1) = .599 BETA (4) = 10.370

X/LNM	.200	.400
PHI		
135.000	-.2580	
180.000	-.2000	-.2490
225.000	-.2440	

MACH (2) = .904 BETA (1) =-10.150

X/LNM	.200	.400
PHI		
135.000	-.1970	
180.000	-.1520	-.2430
225.000	-.2490	

MACH (2) = .901 BETA (2) = -5.040

X/LNM	.200	.400
PHI		
135.000	-.2120	
180.000	-.1700	-.2140
225.000	-.2160	

MACH (2) = .903 BETA (3) = 5.290

X/LNM	.200	.400
PHI		
135.000	-.2290	
180.000	-.1980	-.2360
225.000	-.2310	

AMES 11-7X7 OA12 02A OMS NOZZLE (FBPE02)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .9X5 BETA (4) = 1X.5XX

X/LNM	.2XX	.4XX
PHI		
135.XXX	-.267X	
18X.XXX	-.256X	-.278X
225.XXX	-.27XX	

AMES 11-FT OA12 OBA OMS NOZZLE (RBPE03) (01 MAY 73)

REFERENCE DATA

SREF =	2.421	SQ.FT.	XMRP =	28.531	INCHES
LREF =	39.049	INCHES	YMRP =	.000	INCHES
BREF =	39.049	INCHES	ZMRP =	.000	INCHES
SCALE =	.036	SCALE			

PARAMETRIC DATA

ALPHA =	5.000	RUDDER =	.000
ELEVON =	.000	RUDFLR =	.000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .596 BETA (1) =-10.000

X/LNM	.200	.400
PHI		
135.000	-.229	
180.000	-.149	-.219
225.000	-.195	

MACH (1) = .599 BETA (2) = -4.990

X/LNM	.200	.400
PHI		
135.000	-.194	
180.000	-.137	-.189
225.000	-.191	

MACH (1) = .598 BETA (3) = 5.190

X/LNM	.200	.400
PHI		
135.000	-.214	
180.000	-.197	-.202
225.000	-.212	

MACH (1) = .598 BETA (4) = 10.300

X/LNM	.200	.400
PHI		
135.000	-.244	
180.000	-.174	-.235
225.000	-.232	

MACH (2) = .904 BETA (1) =-10.210

X/LNM	.200	.400
PHI		
135.000	-.225	
180.000	-.170	-.243
225.000	-.257	

MACH (2) = .900 BETA (2) = -5.070

X/LNM	.200	.400
PHI		
135.000	-.200	
180.000	-.169	-.209
225.000	-.214	

MACH (2) = .901 BETA (3) = 5.250

X/LNM	.200	.400
PHI		
135.000	-.207	
180.000	-.171	-.209
225.000	-.214	

AMES 11-7U7 OA12 OBA OMS NOZZLE (RBPE03)

SECTION ' 1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .9U4 BETA (4) = 1U.43U

X/LRM	.2UU	.4UU
PHI		
135.UUU	-.235U	
18U.UUU	-.253U	-.254U
225.UUU	-.267U	

AMES 11-7U7 OA12 OEA OMS NOZZLE (RBPEU4) (01 MAY 73)

REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8495 INCHES YMRP = .0000 INCHES
BREF = 39.8495 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 10.000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) =-10.110

X/LNM	.200	.400
PHI		
135.000	-.2520	
180.000	-.2000	-.2380
225.000	-.2390	

MACH (1) = .598 BETA (2) = -5.020

X/LNM	.200	.400
PHI		
135.000	-.2130	
180.000	-.1650	-.2060
225.000	-.2060	

MACH (1) = .596 BETA (3) = 5.170

X/LNM	.200	.400
PHI		
135.000	-.2060	
180.000	-.1890	-.2010
225.000	-.2080	

MACH (1) = .597 BETA (4) = 10.270

X/LNM	.200	.400
PHI		
135.000	-.2400	
180.000	-.2220	-.2470
225.000	-.2380	

MACH (2) = .902 BETA (1) =-10.230

X/LNM	.200	.400
PHI		
135.000	-.2690	
180.000	-.1930	-.2490
225.000	-.2620	

MACH (2) = .900 BETA (2) = -5.070

X/LNM	.200	.400
PHI		
135.000	-.2180	
180.000	-.1710	-.2190
225.000	-.2260	

MACH (2) = .902 BETA (3) = 5.230

X/LNM	.200	.400
PHI		
135.000	-.2210	
180.000	-.1930	-.2220
225.000	-.2290	

AMES 11-7U7 OA12 O2A OMS NOZZLE (RBPED4)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .9U7 BETA (4) = 15.39U

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.261U	
18U.UUU	-.259U	-.269U
225.UUU	-.273U	

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AMES 11-7U7 OA12 02A OMS NOZZLE

REFERENCE DATA

SREF =	2.4210	SQ.FT.	XMRP =	28.5300	INCHES
LREF =	39.8490	INCHES	YMRP =	.0000	INCHES
BREF =	39.8490	INCHES	ZMRP =	.0000	INCHES
SCALE =	.0300	SCALE			

PARAMETRIC DATA

ALPHA =	15.000	RUDDER =	.000
ELEVON =	.000	RUDFLR =	.000

SECTION (1)OMS NOZZLE

DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) =-10.090

X/LNM	.200	.400
PHI		
135.000	-.2670	
180.000	-.2380	-.2580
225.000	-.2660	

MACH (1) = .598 BETA (2) = -5.000

X/LNM	.200	.400
PHI		
135.000	-.2520	
180.000	-.1740	-.2330
225.000	-.2310	

MACH (1) = .596 BETA (3) = 5.180

X/LNM	.200	.400
PHI		
135.000	-.2310	
180.000	-.2080	-.2310
225.000	-.2390	

MACH (1) = .600 BETA (4) = 10.290

X/LNM	.200	.400
PHI		
135.000	-.2480	
180.000	-.2560	-.2650
225.000	-.2670	

MACH (2) = .904 BETA (1) =-10.200

X/LNM	.200	.400
PHI		
135.000	-.2750	
180.000	-.2650	-.2900
225.000	-.3050	

MACH (2) = .902 BETA (2) = -5.050

X/LNM	.200	.400
PHI		
135.000	-.2330	
180.000	-.2040	-.2610
225.000	-.2820	

MACH (2) = .904 BETA (3) = 5.220

X/LNM	.200	.400
PHI		
135.000	-.2640	
180.000	-.2640	-.2790
225.000	-.2900	

AMES 11-7.7 OA12 O2A OMS NOZZLE (RBFEUS)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .9.4 BETA (4) = 1.39.

X/LNM	.2..	.4..
PHI		
135....	-.291.	
18.....	-.269.	-.286.
225....	-.294.	

AMES 11-7X7 OA12 O2A OMS NOZZLE (RBPEU6) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 20.000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .596 BETA (1) =-10.030

X/LNM	.200	.400
PHI		
135.000	-.3210	
180.000	-.2700	-.2870
225.000	-.3130	

MACH (1) = .597 BETA (2) = -4.970

X/LNM	.200	.400
PHI		
135.000	-.3010	
180.000	-.1670	-.2560
225.000	-.2940	

MACH (1) = .597 BETA (3) = 5.210

X/LNM	.200	.400
PHI		
135.000	-.2440	
180.000	-.2390	-.2810
225.000	-.2830	

MACH (1) = .599 BETA (4) = 10.360

X/LNM	.200	.400
PHI		
135.000	-.2990	
180.000	-.2860	-.3040
225.000	-.3050	

MACH (2) = .902 BETA (1) =-10.110

X/LNM	.200	.400
PHI		
135.000	-.3320	
180.000	-.3240	-.3500
225.000	-.3650	

MACH (2) = .900 BETA (2) = -5.020

X/LNM	.200	.400
PHI		
135.000	-.3620	
180.000	-.2760	-.3310
225.000	-.3630	

MACH (2) = .904 BETA (3) = 5.260

X/LNM	.200	.400
PHI		
135.000	-.2900	
180.000	-.2750	-.3180
225.000	-.3490	

AMES 11-7U7 OA12 O2A OMS NOZZLE (RBPE06)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .9U5 BETA (4) = 1U.43U

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.293U	
18U.UUU	-.262U	-.3U9U
225.UUU	-.357U	

AMES 11-7U7 OA12 O2A OMS NOZZLE (RBPEU7) (01 MAY 73)

REFERENCE DATA

SREF = 2.421U SQ.FT. XMRP = 28.53UU INCHES
LREF = 39.849U INCHES YMRP = .UUUU INCHES
BREF = 39.849U INCHES ZMRP = .UUUU INCHES
SCALE = .U3UU SCALE

PARAMETRIC DATA

ALPHA = .UUU RUDDER = -1U.UUU
ELEVON = .UUU RUDFLR = .UUU

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .6UU BETA (1) = -7.98U

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.179U	
18U.UUU	-.149U	-.2U1U
225.UUU	-.2U8U	

MACH (1) = .6UU BETA (2) = -3.94U

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.185U	
18U.UUU	-.147U	-.195U
225.UUU	-.194U	

MACH (1) = .6UU BETA (3) = .99U

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.199U	
18U.UUU	-.167U	-.2U2U
225.UUU	-.2U5U	

MACH (1) = .599 BETA (4) = 4.21U

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.213U	
18U.UUU	-.2UUU	-.218U
225.UUU	-.228U	

MACH (1) = .597 BETA (5) = 8.32U

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.236U	
18U.UUU	-.216U	-.234U
225.UUU	-.242U	

MACH (2) = .9U2 BETA (1) = -8.U9U

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.21UU	
18U.UUU	-.174U	-.232U
225.UUU	-.233U	

MACH (2) = .9U1 BETA (2) = -4.UUU

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.2U7U	
18U.UUU	-.181U	-.215U
225.UUU	-.216U	

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPEU7)

AMES 11-7U7 OA12 O2A OMS NOZZLE

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .903 BETA (3) = .69U

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.214U	
18U.UUU	-.193U	-.224U
225.UUU	-.227U	

MACH (2) = .9U2 BETA (4) = 4.26U

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.226U	
18U.UUU	-.194U	-.232U
225.UUU	-.229U	

MACH (2) = .9U5 BETA (5) = 8.44U

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.277U	
18U.UUU	-.27UU	-.277U
225.UUU	-.276U	

AMES 11-FT OA12 02A OMS NOZZLE (RB-208) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.53[illegible] INCHES
LREF = 39.849[illegible] INCHES YMRP = .[illegible] INCHES
BREF = 39.849[illegible] INCHES ZMRP = .[illegible] INCHES
SCALE = .03[illegible] SCALE

PARAMETRIC DATA

ALPHA = 5.[illegible] RUDDER = -15.[illegible]
ELEVON = .[illegible] RUDFLR = .[illegible]

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .6[illegible] BETA (1) = -8.[illegible]

X/LNM	.2[illegible]	.4[illegible]
PHI		
135.[illegible]	-.195[illegible]	
180.[illegible]	-.159[illegible]	-.196[illegible]
225.[illegible]	-.193[illegible]	

MACH (1) = .599 BETA (2) = -3.97[illegible]

X/LNM	.2[illegible]	.4[illegible]
PHI		
135.[illegible]	-.184[illegible]	
180.[illegible]	-.151[illegible]	-.186[illegible]
225.[illegible]	-.193[illegible]	

MACH (1) = .6[illegible] BETA (3) = .09[illegible]

X/LNM	.2[illegible]	.4[illegible]
PHI		
135.[illegible]	-.18[illegible]	
180.[illegible]	-.155[illegible]	-.194[illegible]
225.[illegible]	-.21[illegible]	

MACH (1) = .601 BETA (4) = 4.18[illegible]

X/LNM	.2[illegible]	.4[illegible]
PHI		
135.[illegible]	-.203[illegible]	
180.[illegible]	-.193[illegible]	-.211[illegible]
225.[illegible]	-.215[illegible]	

MACH (1) = .601 BETA (5) = 8.26[illegible]

X/LNM	.2[illegible]	.4[illegible]
PHI		
135.[illegible]	-.222[illegible]	
180.[illegible]	-.201[illegible]	-.238[illegible]
225.[illegible]	-.234[illegible]	

MACH (2) = .90[illegible] BETA (1) = -8.14[illegible]

X/LNM	.2[illegible]	.4[illegible]
PHI		
135.[illegible]	-.21[illegible]	
180.[illegible]	-.175[illegible]	-.215[illegible]
225.[illegible]	-.227[illegible]	

MACH (2) = .903 BETA (2) = -4.03[illegible]

X/LNM	.2[illegible]	.4[illegible]
PHI		
135.[illegible]	-.191[illegible]	
180.[illegible]	-.173[illegible]	-.214[illegible]
225.[illegible]	-.206[illegible]	

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (FBFE08)

AMES 11-7U7 OA12 O2A OMS NOZZLE

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .901 BETA (3) = .09U

X/LNM	.2U	.4U
PHI		
135.0U	-.19U	
180.0U	-.173U	-.2U2U
225.0U	-.2U8U	

MACH (2) = .9U3 BETA (4) = 4.22U

X/LNM	.2U	.4U
PHI		
135.0U	-.2U8U	
180.0U	-.183U	-.215U
225.0U	-.214U	

MACH (2) = .901 BETA (5) = 8.37U

X/LNM	.2U	.4U
PHI		
135.0U	-.224U	
180.0U	-.215U	-.249U
225.0U	-.246U	

AMES 11-7X7 OA12 O2A OMS NOZZLE (RBPEU9) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.530[illegible] INCHES
LREF = 39.849[illegible] INCHES YMRP = .[illegible] INCHES
BREF = 39.849[illegible] INCHES ZMRP = .[illegible] INCHES
SCALE = .03[illegible] SCALE

PARAMETRIC DATA

ALPHA = 10.[illegible] RUDDER = -10.[illegible]
ELEVON = .[illegible] RUDFLR = .[illegible]

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -8.160

X/LNM	.200	.400
PHI		
135.000	-.2130	
180.000	-.1920	-.2110
225.000	-.2140	

MACH (1) = .601 BETA (2) = -3.980

X/LNM	.200	.400
PHI		
135.000	-.2000	
180.000	-.1690	-.1970
225.000	-.2060	

MACH (1) = .600 BETA (3) = .090

X/LNM	.200	.400
PHI		
135.000	-.1940	
180.000	-.1480	-.1890
225.000	-.2060	

MACH (1) = .599 BETA (4) = 4.170

X/LNM	.200	.400
PHI		
135.000	-.1960	
180.000	-.1840	-.2080
225.000	-.2180	

MACH (1) = .599 BETA (5) = 8.240

X/LNM	.200	.400
PHI		
135.000	-.2240	
180.000	-.2140	-.2290
225.000	-.2250	

MACH (2) = .904 BETA (1) = -8.160

X/LNM	.200	.400
PHI		
135.00	-.2520	
180.000	-.2050	-.2400
225.000	-.2480	

MACH (2) = .902 BETA (2) = -4.040

X/LNM	.200	.400
PHI		
135.000	-.2210	
180.000	-.1860	-.2240
225.000	-.2300	

AMES 11-7U7 OA12 OBA OMS NOZZLE (RBPE109)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .899 BETA (3) = .09U

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.194U	
18U.UUU	-.19UU	-.22UU
225.UUU	-.23UU	

MACH (2) = .898 BETA (4) = 4.2UU

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.216U	
18U.UUU	-.191U	-.228U
225.UUU	-.236U	

MACH (2) = .9UU BETA (5) = 8.33U

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.248U	
18U.UUU	-.224U	-.258U
225.UUU	-.256U	

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPE10) (01 MAY 73)

AMES 11-7X7 OA12 OPA OMS NOZZLE

PARAMETRIC DATA

ALPHA = 15.000 RUDDER = -10.000
ELEVON = .000 RUDFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 20.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

SECTION (1)OMS NOZZLE

DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -8.040

X/LNM	.200	.400
PHI		
135.000	-.2480	
180.000	-.2260	-.2470
225.000	-.2550	

MACH (1) = .599 BETA (2) = -3.980

X/LNM	.200	.400
PHI		
135.000	-.2430	
180.000	-.1870	-.2270
225.000	-.2300	

MACH (1) = .598 BETA (3) = .080

X/LNM	.200	.400
PHI		
135.000	-.2190	
180.000	-.2290	-.2490
225.000	-.2540	

MACH (1) = .596 BETA (4) = 4.170

X/LNM	.200	.400
PHI		
135.000	-.2190	
180.000	-.2100	-.2390
225.000	-.2410	

MACH (1) = .601 BETA (5) = 8.250

X/LNM	.200	.400
PHI		
135.000	-.2480	
180.000	-.2380	-.2590
225.000	-.2570	

MACH (2) = .902 BETA (1) = -8.130

X/LNM	.200	.400
PHI		
135.000	-.2560	
180.000	-.2560	-.2660
225.000	-.2830	

MACH (2) = .899 BETA (2) = -4.020

X/LNM	.200	.400
PHI		
135.000	-.2440	
180.000	-.1780	-.2650
225.000	-.2690	

AMES 11-7X7 OA12 OBA OMS NOZZLE (RBPE10)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .961 BETA (3) = [illegible]

X/LNM	.200	.400
PHI		
135.000	-.235	
180.000	-.267	-.278
225.000	-.286	

MACH (2) = .961 BETA (4) = 4.210

X/LNM	.200	.400
PHI		
135.000	-.255	
180.000	-.249	-.271
225.000	-.273	

MACH (2) = .900 BETA (5) = 8.330

X/LNM	.200	.400
PHI		
135.000	-.280	
180.000	-.273	-.277
225.000	-.286	

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPE11) (01 MAY 73)

AMES 11-7X7 OA12 O2A OMS NOZZLE

REFERENCE DATA

SREF	=	2.4210	SQ.FT.	XMRP	= 28.5300 INCHES
LREF	=	39.8490	INCHES	YMRP	= .0000 INCHES
BREF	=	39.8490	INCHES	ZMRP	= .0000 INCHES
SCALE	=	.0300	SCALE		

PARAMETRIC DATA

ALPHA	= 20.000	RUDDER	= -10.000
ELEVON	= .000	RUDFLR	= .000

SECTION (1)OMS NOZZLE

DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -7.990

X/LNM	.200	.400
PHI		
135.000	-.3030	
180.000	-.2480	-.2860
225.000	-.2910	

MACH (1) = .598 BETA (2) = -3.960

X/LNM	.200	.400
PHI		
135.000	-.2950	
180.000	-.1100	-.2300
225.000	-.2980	

MACH (1) = .598 BETA (3) = .090

X/LNM	.200	.400
PHI		
135.000	-.2410	
180.000	-.2850	-.3220
225.000	-.3150	

MACH (1) = .598 BETA (4) = 4.190

X/LNM	.200	.400
PHI		
135.000	-.2540	
180.000	-.2580	-.2860
225.000	-.2940	

MACH (1) = .600 BETA (5) = 8.310

X/LNM	.200	.400
PHI		
135.000	-.2900	
180.000	-.2770	-.2990
225.000	-.2950	

MACH (2) = .903 BETA (1) = -8.060

X/LNM	.200	.400
PHI		
135.000	-.3700	
180.000	-.3160	-.3390
225.000	-.3720	

MACH (2) = .900 BETA (2) = -3.980

X/LNM	.200	.400
PHI		
135.000	-.3410	
180.000	-.2820	-.3190
225.000	-.3700	

AMES 11-7U7 OA12 O2A OMS NOZZLE (RBPE11)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .9UU BETA (3) = .UUU

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.2229	
18U.UUU	-.3159	-.3319
225.UUU	-.3489	

MACH (2) = .9UU BETA (4) = 4.23U

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.3U5U	
18U.UUU	-.2649	-.3389
225.UUU	-.3559	

MACH (2) = .9U1 BETA (5) = 8.36U

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.3U39	
18U.UUU	-.2759	-.3499
225.UUU	-.3579	

AMES 11-7U7 OA12 O2A OMS NOZZLE (RBPE12) (U1 MAY 73)

REFERENCE DATA

SREF = 2.421U SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = .000 RUDDER = -20.000
ELEVON = .000 RUDFLR = .000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -7.970

X/LNM	.200	.400
PHI		
135.000	-.1840	
180.000	-.1680	-.2110
225.000	-.2230	

MACH (1) = .600 BETA (2) = -3.930

X/LNM	.200	.400
PHI		
135.000	-.1970	
180.000	-.1680	-.2080
225.000	-.2150	

MACH (1) = .599 BETA (3) = .100

X/LNM	.200	.400
PHI		
135.000	-.2060	
180.000	-.1840	-.2270
225.000	-.2210	

MACH (1) = .601 BETA (4) = 4.210

X/LNM	.200	.400
PHI		
135.000	-.2300	
180.000	-.2200	-.2380
225.000	-.2400	

MACH (1) = .598 BETA (5) = 8.330

X/LNM	.200	.400
PHI		
135.000	-.2510	
180.000	-.2330	-.2550
225.000	-.2530	

MACH (2) = .901 BETA (1) = -8.090

X/LNM	.200	.400
PHI		
135.000	-.2210	
180.000	-.1840	-.2420
225.000	-.2530	

MACH (2) = .900 BETA (2) = -4.000

X/LNM	.200	.400
PHI		
135.000	-.2180	
180.000	-.1890	-.2290
225.000	-.2290	

AMES 11-7U7 OA12 O2A OMS NOZZLE (RBPE12)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .9UU BETA (3) = .1U0

X/LNM	.2U0	.4U0
PHI		
135.UU0	-.227U	
18U.UU0	-.2U3U	-.244U
225.UU0	-.243U	

MACH (2) = .9U0 BETA (4) = 4.28U

X/LNM	.2U0	.4U0
PHI		
135.UU0	-.24U0	
18U.UU0	-.21U0	-.251U
225.UU0	-.254U	

MACH (2) = .9U3 BETA (5) = 8.45U

X/LNM	.2U0	.4U0
PHI		
135.UU0	-.298U	
18U.UU0	-.279U	-.3U2U
225.UU0	-.297U	

AMES 11-7ft OA12 02A OMS NOZZLE (RBPE13) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = -20.000
ELEVON = .000 RUDFLR = .000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -8.030

X/LNM	.200	.400
PHI		
135.000	-.2100	
180.000	-.1810	-.2160
225.000	-.2150	

MACH (1) = .599 BETA (2) = -3.970

X/LNM	.200	.400
PHI		
135.000	-.2000	
180.000	-.1750	-.2050
225.000	-.2130	

MACH (1) = .598 BETA (3) = .100

X/LNM	.200	.400
PHI		
135.000	-.1970	
180.000	-.1640	-.2060
225.000	-.2110	

MACH (1) = .599 BETA (4) = 4.180

X/LNM	.200	.400
PHI		
135.000	-.2150	
180.000	-.2080	-.2220
225.000	-.2300	

MACH (1) = .600 BETA (5) = 8.270

X/LNM	.200	.400
PHI		
135.000	-.2360	
180.000	-.2180	-.2560
225.000	-.2530	

MACH (2) = .907 BETA (1) = -8.140

X/LNM	.200	.400
PHI		
135.000	-.2270	
180.000	-.1840	-.2390
225.000	-.2460	

MACH (2) = .899 BETA (2) = -4.020

X/LNM	.200	.400
PHI		
135.000	-.2090	
180.000	-.1760	-.2190
225.000	-.2230	

AMES 11-7U7 OA12 O2A OMS NOZZLE (RBPE13)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .901 BETA (3) = .11U

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.2U3U	
18U.UUU	-.181U	-.215U
225.UUU	-.222U	

MACH (2) = .9U3 BETA (4) = 4.23U

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.219U	
18U.UUU	-.193U	-.228U
225.UUU	-.229U	

MACH (2) = .9U2 BETA (5) = 8.38U

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.247U	
18U.UUU	-.237U	-.273U
225.UUU	-.27UU	

AMES 11-FT OA12 O2A OMS NOZZLE (RBPE14) (01 MAY 73)

REFERENCE DATA

SREF = 2.4219 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 10.000 RUDDER = -20.000
ELEVON = .000 RUDFLR = .000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -8.060

X/LNM	.200	.400
PHI		
135.000	-.2220	
180.000	-.2020	-.2180
225.000	-.2220	

MACH (1) = .600 BETA (2) = -3.980

X/LNM	.200	.400
PHI		
135.000	-.2090	
180.000	-.1730	-.2160
225.000	-.2190	

MACH (1) = .599 BETA (3) = .090

X/LNM	.200	.400
PHI		
135.000	-.2060	
180.000	-.1580	-.2170
225.000	-.2260	

MACH (1) = .599 BETA (4) = 4.170

X/LNM	.200	.400
PHI		
135.000	-.2000	
180.000	-.1980	-.2100
225.000	-.2260	

MACH (1) = .602 BETA (5) = 8.250

X/LNM	.200	.400
PHI		
135.000	-.2380	
180.000	-.2310	-.2490
225.000	-.2490	

MACH (2) = .902 BETA (1) = -8.150

X/LNM	.200	.400
PHI		
135.000	-.2530	
180.000	-.1980	-.2470
225.000	-.2530	

MACH (2) = .901 BETA (2) = -4.040

X/LNM	.200	.400
PHI		
135.000	-.2280	
180.000	-.1850	-.2350
225.000	-.2340	

AMES 11-7U7 OA12 O2A OMS NOZZLE (RBPE14)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .899 BETA (3) = .090

X/LNM	.200	.400
PHI		
135.000	-.2030	
180.000	-.1970	-.2290
225.000	-.2410	

MACH (2) = .900 BETA (4) = 4.210

X/LNM	.200	.400
PHI		
135.000	-.2220	
180.000	-.2070	-.2300
225.000	-.2440	

MACH (2) = .906 BETA (5) = 8.350

X/LNM	.200	.400
PHI		
135.000	-.2790	
180.000	-.2550	-.2850
225.000	-.2910	

AMES 11-7X7 OA12 O2A OMS NOZZLE (RBPE15) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 15.000 RUDDER = -20.000
ELEVON = .000 RUDFLR = .000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -8.040

X/LNM	.200	.400
PHI		
135.000	-.2610	
180.000	-.2410	-.2600
225.000	-.2600	

MACH (1) = .599 BETA (2) = -3.970

X/LNM	.200	.400
PHI		
135.000	-.2460	
180.000	-.1990	-.2520
225.000	-.2490	

MACH (1) = .600 BETA (3) = .100

X/LNM	.200	.400
PHI		
135.000	-.2290	
180.000	-.2370	-.2710
225.000	-.2770	

MACH (1) = .598 BETA (4) = 4.180

X/LNM	.200	.400
PHI		
135.000	-.2260	
180.000	-.2210	-.2390
225.000	-.2520	

MACH (1) = .599 BETA (5) = 8.260

X/LNM	.200	.400
PHI		
135.000	-.2650	
180.000	-.2460	-.2590
225.000	-.2750	

MACH (2) = .901 BETA (1) = -8.120

X/LNM	.200	.400
PHI		
135.000	-.2670	
180.000	-.2535	-.2760
225.000	-.2830	

MACH (2) = .900 BETA (2) = -4.010

X/LNM	.200	.400
PHI		
135.000	-.2430	
180.000	-.1870	-.2550
225.000	-.2790	

AMES 11-7U7 OA12 O2A OMS NOZZLE (RBFE15)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .899 BETA (3) = .09U

X/LNM	.2U	.4U
PHI		
135.UU	-.23U	
18U.UU	-.265U	-.272U
225.UU	-.284U	

MACH (2) = .899 BETA (4) = 4.21U

X/LNM	.2U	.4U
PHI		
135.UU	-.262U	
18U.UU	-.251U	-.275U
225.UU	-.279U	

MACH (2) = .898 BETA (5) = 8.34U

X/LNM	.2U	.4U
PHI		
135.UU	-.293U	
18U.UU	-.285U	-.297U
225.UU	-.311U	

AMES 11-7X7 OA12 O2A OMS NOZZLE (RBPE16) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 20.000 RUDDER = -20.000
ELEVON = .000 RUDFLR = .000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -7.990

X/LNM	.200	.400
PHI		
135.000	-.3190	
180.000	-.2600	-.2950
225.000	-.3000	

MACH (1) = .598 BETA (2) = -3.950

X/LNM	.200	.400
PHI		
135.000	-.3110	
180.000	-.1410	-.2430
225.000	-.2970	

MACH (1) = .601 BETA (3) = .100

X/LNM	.200	.400
PHI		
135.000	-.2510	
180.000	-.2960	-.3270
225.000	-.3210	

MACH (1) = .597 BETA (4) = 4.200

X/LNM	.200	.400
PHI		
135.000	-.2650	
180.000	-.2690	-.2940
225.000	-.3100	

MACH (1) = .604 BETA (5) = 8.320

X/LNM	.200	.400
PHI		
135.000	-.2870	
180.000	-.2770	-.3090
225.000	-.3170	

MACH (2) = .898 BETA (1) = -8.060

X/LNM	.200	.400
PHI		
135.000	-.3580	
180.000	-.3190	-.3360
225.000	-.3730	

MACH (2) = .897 BETA (2) = -3.980

X/LNM	.200	.400
PHI		
135.000	-.3460	
180.000	-.2660	-.3190
225.000	-.3600	

AMES 11-7U7 OA12 O2A OMS NOZZLE (RBPE16)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .897 BETA (3) = .09U

X/LNM	.2U	.4U
PHI		
135.UU	-.226U	
18U.UU	-.298U	-.345U
225.UU	-.357U	

MACH (2) = .896 BETA (4) = 4.24U

X/LNM	.2U	.4U
PHI		
135.UU	-.3U7U	
18U.UU	-.266U	-.34IU
225.UU	-.366U	

MACH (2) = .899 BETA (5) = 8.37U

X/LNM	.2U	.4U
PHI		
135.UU	-.299U	
18U.UU	-.281U	-.364U
225.UU	-.38IU	

AMES 11-7U7 OA12 O2A OMS NOZZLE (RBPE17) (01 MAY 73)

REFERENCE DATA

SREF =	2.4219	SQ.FT.	XMRP =	28.5300	INCHES
LREF =	39.8490	INCHES	YMRP =	.0000	INCHES
BREF =	39.8490	INCHES	ZMRP =	.0000	INCHES
SCALE =	.0300	SCALE			

PARAMETRIC DATA

ALPHA =	.000	RUDDER =	.000
ELEVON =	10.000	RUDFLR =	.000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .597 BETA (1) =-10.000

X/LNM	.200	.400
PHI		
135.000	-.2000	
180.000	-.1180	-.2300
225.000	-.2360	

MACH (1) = .598 BETA (2) = .080

X/LNM	.200	.400
PHI		
135.000	-.2250	
180.000	-.1880	-.2250
225.000	-.2310	

MACH (1) = .600 BETA (3) = 10.370

X/LNM	.200	.400
PHI		
135.000	-.2870	
180.000	-.2170	-.2810
225.000	-.2780	

MACH (2) = .901 BETA (1) =-10.120

X/LNM	.200	.400
PHI		
135.000	-.2320	
180.000	-.1920	-.2680
225.000	-.2870	

MACH (2) = .899 BETA (2) = .080

X/LNM	.200	.400
PHI		
135.000	-.2420	
180.000	-.2200	-.2510
225.000	-.2500	

MACH (2) = .903 BETA (3) = 10.490

X/LNM	.200	.400
PHI		
135.000	-.3020	
180.000	-.2920	-.3100
225.000	-.2860	

AMES 11-707 OA12 O2A OMS NOZZLE (RBPE18) (01 MAY 73)

REFERENCE DATA

SREF =	2.4210	SQ.FT.	XMRP =	28.5300	INCHES
LREF =	39.6490	INCHES	YMRP =	.0000	INCHES
BREF =	39.8490	INCHES	ZMRP =	.0000	INCHES
SCALE =	.0300	SCALE			

PARAMETRIC DATA

ALPHA =	5.000	RUDDER =	.000
ELEVON =	10.000	RUDFLR =	.000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) =-10.070

X/LNM	.200	.400
PHI		
135.000	-.2490	
180.000	-.1630	-.2350
225.000	-.2380	

MACH (1) = .596 BETA (2) = .080

X/LNM	.200	.400
PHI		
135.000	-.2200	
180.000	-.1830	-.2140
225.000	-.2210	

MACH (1) = .598 BETA (3) = 10.300

X/LNM	.200	.400
PHI		
135.000	-.2840	
180.000	-.2100	-.2730
225.000	-.2740	

MACH (2) = .899 BETA (1) =-10.190

X/LNM	.200	.400
PHI		
135.000	-.2430	
180.000	-.1980	-.2680
225.000	-.2810	

MACH (2) = .901 BETA (2) = .080

X/LNM	.200	.400
PHI		
135.000	-.2230	
180.000	-.1970	-.2340
225.000	-.2370	

MACH (2) = .895 BETA (3) = 10.420

X/LNM	.200	.400
PHI		
135.000	-.2870	
180.000	-.2830	-.3000
225.000	-.2950	

AMES 11-7U7 OA12 O2A OMS NOZZLE (RBPE19) (01 MAY 73)

REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 10.000 RUDDER = .000
ELEVON = 10.000 RUDFLR = .000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) =-10.110

X/LNM	.200	.400
PHI		
135.000	-.2640	
180.000	-.2560	-.2500
225.000	-.2540	

MACH (1) = .597 BETA (2) = .080

X/LNM	.200	.400
PHI		
135.000	-.2210	
180.000	-.1730	-.2210
225.000	-.2260	

MACH (1) = .599 BETA (3) = 10.270

X/LNM	.200	.400
PHI		
135.000	-.2930	
180.000	-.2490	-.2780
225.000	-.2770	

MACH (2) = .904 BETA (1) =-10.210

X/LNM	.200	.400
PHI		
135.000	-.2980	
180.000	-.2560	-.2890
225.000	-.3070	

MACH (2) = .898 BETA (2) = .090

X/LNM	.200	.400
PHI		
135.000	-.2580	
180.000	-.2510	-.2660
225.000	-.2720	

MACH (2) = .897 BETA (3) = 10.390

X/LNM	.200	.400
PHI		
135.000	-.2870	
180.000	-.2850	-.3020
225.000	-.3030	

AMES 11-7U7 OA12 O2A OMS NOZZLE (RBPE2U) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.53[illegible] INCHES
LREF = 39.84[illegible] INCHES YMRP = .[illegible] INCHES
BREF = 39.84[illegible] INCHES ZMRP = .[illegible] INCHES
SCALE = .03[illegible] SCALE

PARAMETRIC DATA

ALPHA = 15.[illegible] RUDDER = .[illegible]
ELEVON = 10.[illegible] RUDFLR = .[illegible]

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) =-10.08[illegible]

X/LNM	.200	.400
PHI		
135.[illegible]	-.2850	
180.[illegible]	-.2390	-.2740
225.[illegible]	-.2890	

MACH (1) = .599 BETA (2) = .08[illegible]

X/LNM	.200	.400
PHI		
135.[illegible]	-.2520	
180.[illegible]	-.2720	-.2750
225.[illegible]	-.2930	

MACH (1) = .599 BETA (3) = 10.290

X/LNM	.20	.400
PHI		
135.[illegible]	-.2900	
180.[illegible]	-.2900	-.2940
225.[illegible]	-.2920	

MACH (2) = .902 BETA (1) =-10.19[illegible]

X/LNM	.20[illegible]	.400
PHI		
135.[illegible]	-.2860	
180.[illegible]	-.2980	-.3140
225.[illegible]	-.3290	

MACH (2) = .9[illegible] BETA (2) = .07[illegible]

X/LNM	.20[illegible]	.40[illegible]
PHI		
135.[illegible]	-.3060	
180.[illegible]	-.3140	-.3170
225.[illegible]	-.3[illegible]0	

MACH (2) = .902 BETA (3) = 10.38[illegible]

X/LNM	.200	.400
PHI		
135.[illegible]	-.3120	
180.[illegible]	-.3030	-.3200
225.[illegible]	-.3300	

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 02A OMS NOZZLE (RBPE21) (01 MAY 73)

REFERENCE DATA

SREF	=	2.4210 SQ.FT.	XMRP	=	28.5300 INCHES
LREF	=	39.8490 INCHES	YMRP	=	.0000 INCHES
BREF	=	39.8490 INCHES	ZMRP	=	.0000 INCHES
SCALE	=	.0300 SCALE			

PARAMETRIC DATA

ALPHA	=	20.000	RUDDER = .000
ELEVON	=	10.000	RUDFLR = .000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) =-10.030

X/LNM	.200	.400
PHI		
135.000	-.3530	
180.000	-.2910	-.3080
225.000	-.3470	

MACH (1) = .601 BETA (2) = .070

X/LNM	.200	.400
PHI		
135.000	-.2810	
180.000	-.3400	-.3270
225.000	-.3480	

MACH (1) = .598 BETA (3) = 10.370

X/LNM	.200	.400
PHI		
135.000	-.3220	
180.000	-.3080	-.3240
225.000	-.3290	

MACH (2) = .902 BETA (1) =-10.100

X/LNM	.200	.400
PHI		
135.000	-.3570	
180.000	-.3550	-.3940
225.000	-.4330	

MACH (2) = .894 BETA (2) = .080

X/LNM	.200	.400
PHI		
135.000	-.3360	
180.000	-.3730	-.3860
225.000	-.3910	

MACH (2) = .901 BETA (3) = 10.420

X/LNM	.200	.400
PHI		
135.000	-.3580	
180.000	-.3370	-.3900
225.000	-.4190	

AMES 11-7U7 OA12 O2A OMS NOZZLE (RBPE22) (01 MAY 73)

REFERENCE DATA

SREF =	2.4215 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.849U INCHES	YMRP =	.UUUU INCHES		
BREF =	99.849U INCHES	ZMRP =	.UUUU INCHES		
SCALE =	.U3YU SCALE				

PARAMETRIC DATA

ALPHA =	.UUU	RUDDER =	.UUU
ELEVON =	-1U.UUU	RUDFLR =	.UUU

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -7.97U

X/LRM	.2UU	.4UU
PHI		
135.UUU	-.181U	
18U.UUU	-.115U	-.165U
225.UUU	-.168U	

MACH (1) = .595 BETA (2) = -3.94U

X/LRM	.2UU	.4UU
PHI		
135.UUU	-.173U	
18U.UUU	-.114U	-.158U
225.UUU	-.161U	

MACH (1) = .597 BETA (3) = .U8U

X/LRM	.2UU	.4UU
PHI		
135.UUU	-.175U	
18U.UUU	-.132U	-.165U
225.UUU	-.176U	

MACH (1) = .596 BETA (4) = 4.2UU

X/LRM	.2UU	.4UU
PHI		
135.UUU	-.187U	
18U.UUU	-.167U	-.175U
225.UUU	-.187U	

MACH (1) = .597 BETA (5) = 8.3UU

X/LRM	.2UU	.4UU
PHI		
135.UUU	-.2U2U	
18U.UUU	-.181U	-.198U
225.UUU	-.2U2U	

MACH (2) = .9U4 BETA (1) = -8.U9U

X/LRM	.2UU	.4UU
PHI		
135.UUU	-.2U7U	
18U.UUU	-.156U	-.2U5U
225.UUU	-.2U9U	

MACH (2) = .9U2 BETA (2) = -4.UUU

X/LRM	.2UU	.4UU
PHI		
135.UUU	-.2U3U	
18U.UUU	-.159U	-.2U3U
225.UUU	-.2U1U	

AMES 11-707 OA12 02A OMS NOZZLE (RBPE22)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .698 BETA (3) = .080

X/LNM	.200	.400
PHI		
135.000	-.1950	
180.000	-.1710	-.1930
225.000	-.1950	

MACH (2) = .899 BETA (4) = 4.250

X/LNM	.200	.400
PHI		
135.000	-.2000	
180.000	-.1800	-.2000
225.000	-.1980	

MACH (2) = .900 BETA (5) = 8.410

X/LNM	.200	.400
PHI		
135.000	-.2270	
180.000	-.1760	-.2240
225.000	-.2230	

AMES 11-7[illegible] OA12 OEA OMS NOZZLE (RBPE23) (01 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHA =	5.000	RUDDER =	.000
ELEVON =	-10.000	RUDFLR =	.000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -8.030

X/LNM	.200	.400
PHI		
135.000	-.2090	
180.000	-.1550	-.1880
225.000	-.1930	

MACH (1) = .598 BETA (2) = -3.970

X/LNM	.200	.400
PHI		
135.000	-.1850	
180.000	-.1350	-.1610
225.000	-.1790	

MACH (1) = .599 BETA (3) = .080

X/LNM	.200	.400
PHI		
135.000	-.1720	
180.000	-.1320	-.1590
225.000	-.1810	

MACH (1) = .598 BETA (4) = 4.170

X/LNM	.200	.400
PHI		
135.000	-.1840	
180.000	-.1690	-.1690
225.000	-.1850	

MACH (1) = .596 BETA (5) = 8.250

X/LNM	.200	.400
PHI		
135.000	-.1840	
180.000	-.1600	-.1900
225.000	-.1960	

MACH (2) = .903 BETA (1) = -8.140

X/LNM	.200	.400
PHI		
135.000	-.2240	
180.000	-.1790	-.2100
225.000	-.2210	

MACH (2) = .902 BETA (2) = -4.030

X/LNM	.200	.400
PHI		
135.000	-.1980	
180.000	-.1630	-.1960
225.000	-.1910	

AMES 11-7U7 OA12 O2A OMS NOZZLE (RBPE23)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .901 BETA (3) = .090

X/LNM	.200	.400
PHI		
135.000	-.1870	
180.000	-.1600	-.1870
225.000	-.1920	

MACH (2) = .903 BETA (4) = 4.220

X/LNM	.200	.400
PHI		
135.000	-.2030	
180.000	-.1840	-.2070
225.000	-.2110	

MACH (2) = .901 BETA (5) = 8.350

X/LNM	.200	.400
PHI		
135.000	-.2180	
180.000	-.1880	-.2260
225.000	-.2230	

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7X7 OA12 O2A OMS NOZZLE (RBPE24) (01 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHA =	10.000	RUDDER =	.000
ELEVON =	-10.000	RUDFLR =	.000

SECTION (1)OMS NOZZLE

DEPENDENT VARIABLE CP

MACH (1) = .597 BETA (1) = -8.060

X/LNM	.200	.400
PHI		
135.000	-.2400	
180.000	-.2060	-.2220
225.000	-.2140	

MACH (1) = .599 BETA (2) = -3.990

X/LNM	.200	.400
PHI		
135.000	-.2110	
180.000	-.1640	-.1800
225.000	-.2000	

MACH (1) = .600 BETA (3) = .080

X/LNM	.200	.400
PHI		
135.000	-.1820	
180.000	-.1130	-.1540
225.000	-.1730	

MACH (1) = .598 BETA (4) = 4.150

X/LNM	.200	.400
PHI		
135.000	-.1870	
180.000	-.1520	-.1790
225.000	-.1870	

MACH (1) = .599 BETA (5) = 8.230

X/LNM	.200	.400
PHI		
135.000	-.1910	
180.000	-.1890	-.2030
225.000	-.2050	

MACH (2) = .900 BETA (1) = -8.150

X/LNM	.200	.400
PHI		
135.000	-.2550	
180.000	-.1750	-.2180
225.000	-.2240	

MACH (2) = .900 BETA (2) = -4.030

X/LNM	.200	.400
PHI		
135.000	-.1930	
180.000	-.1500	-.1920
225.000	-.2000	

AMES 11-7D7 OA12 O2A OMS NOZZLE (RBPE24)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .899 BETA (3) = .080

X/LNM	.200	.400
PHI		
135.000	-.1850	
180.000	-.1560	-.1840
225.000	-.1980	

MACH (2) = .902 BETA (4) = 4.190

X/LNM	.200	.400
PHI		
135.000	-.2120	
180.000	-.1870	-.2110
225.000	-.2150	

MACH (2) = .900 BETA (5) = 8.330

X/LNM	.200	.400
PHI		
135.000	-.2270	
180.000	-.2010	-.2330
225.000	-.2320	

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPE25) (01 MAY 73)

AMES 11-7U7 OA12 O2A OMS NOZZLE

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5310 INCHES
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES
SCALE =	.0300 SCALE		

PARAMETRIC DATA

ALPHA =	15.000	RUDDER =	.000
ELEVON =	-10.000	RUDFLR =	.000

SECTION (1)OMS NOZZLE

DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -8.040

X/LNM	.200	.400
PHI		
135.000	-.2620	
180.000	-.2260	-.2400
225.000	-.2370	

MACH (1) = .598 BETA (2) = -3.990

X/LNM	.200	.400
PHI		
135.000	-.2260	
180.000	-.1640	-.1960
225.000	-.2030	

MACH (1) = .597 BETA (3) = .060

X/LNM	.200	.400
PHI		
135.000	-.2110	
180.000	-.1520	-.2040
225.000	-.2260	

MACH (1) = .601 BETA (4) = 4.160

X/LNM	.200	.400
PHI		
135.000	-.2030	
180.000	-.1770	-.2090
225.000	-.2250	

MACH (1) = .601 BETA (5) = 8.250

X/LNM	.200	.400
PHI		
135.000	-.2400	
180.000	-.2230	-.2380
225.000	-.2390	

MACH (2) = .902 BETA (1) = -8.130

X/LNM	.200	.400
PHI		
135.000	-.2590	
180.000	-.2190	-.2480
225.000	-.2540	

MACH (2) = .901 BETA (2) = -4.020

X/LNM	.200	.400
PHI		
135.000	-.2230	
180.000	-.1580	-.2150
225.000	-.2290	

AMES 11-707 OA12 02A OMS NOZZLE (RBPE25)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .902 BETA (3) = .080

X/LNM	.200	.400
PHI		
135.000	-.1660	
180.000	-.2160	-.2250
225.000	-.2380	

MACH (2) = .898 BETA (4) = 4.190

X/LNM	.200	.400
PHI		
135.000	-.2160	
180.000	-.1790	-.2330
225.000	-.2310	

MACH (2) = .899 BETA (5) = 8.330

X/LNM	.200	.400
PHI		
135.000	-.2090	
180.000	-.1870	-.2430
225.000	-.2460	

AMES 11-707 OA12 O2A OMS NOZZLE (RBPE26) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0390 SCALE

PARAMETRIC DATA

ALPHA = 20.000 RUDDER = .000
ELEVON = -10.000 RUDFLR = .000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .597 BETA (1) = -7.980

X/LNM	.200	.400
PHI		
135.000	-.3010	
180.000	-.2280	-.2700
225.000	-.2750	

MACH (1) = .598 BETA (2) = -3.960

X/LNM	.200	.400
PHI		
135.000	-.2870	
180.000	-.0950	-.2050
225.000	-.2790	

MACH (1) = .600 BETA (3) = .070

X/LNM	.200	.400
PHI		
135.000	-.2320	
180.000	-.1950	-.2720
225.000	-.2710	

MACH (1) = .598 BETA (4) = 4.190

X/LNM	.200	.400
PHI		
135.000	-.2360	
180.000	-.2110	-.2590
225.000	-.2610	

MACH (1) = .599 BETA (5) = 8.300

X/LNM	.200	.400
PHI		
135.000	-.2640	
180.000	-.2500	-.2790
225.000	-.2700	

MACH (2) = .903 BETA (1) = -8.070

X/LNM	.200	.400
PHI		
135.000	-.3580	
180.000	-.3030	-.3210
225.000	-.3460	

MACH (2) = .901 BETA (2) = -3.990

X/LNM	.200	.400
PHI		
135.000	-.3420	
180.000	-.2580	-.3040
225.000	-.3370	

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPE26)

AMES 11-FUT OA12 OEA OMS NOZZLE

DEPENDENT VARIABLE CP

SECTION (1)OMS NOZZLE

MACH (2) = .899 BETA (3) = .1M

X/LNM	.2(X)	.4(X)
PHI		
135.(X)	-.244(X)	
180.(X)	-.287(X)	-.312(X)
225.(X)	-.311(X)	

MACH (2) = .898 BETA (4) = 4.23(X)

X/LNM	.2(X)	.4(X)
PHI		
135.(X)	-.260(X)	
180.(X)	-.254(X)	-.296(X)
225.(X)	-.315(X)	

MACH (2) = .904 BETA (5) = 8.36(X)

X/LNM	.2(X)	.4(X)
PHI		
135.(X)	-.273(X)	
180.(X)	-.259(X)	-.298(X)
225.(X)	-.311(X)	

AMES 11-7U7 OA12 O2A OMS NOZZLE (RBFE27) (01 MAY 73)

REFERENCE DATA

SREF = 2.421U SQ.FT. XMRP = 28.53U0 INCHES
LREF = 39.849U INCHES YMRP = .UUU0 INCHES
BREF = 39.849U INCHES ZMRP = .UUU0 INCHES
SCALE = .U3U0 SCALE

PARAMETRIC DATA

ALPHA = -4.UUU RUDDEP = .UUU
ELEVON = -2U.UUU RUDFLP = .UUU

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .6U0 BETA (1) = -4.91U

X/LNM	.2U0	.4U0
PHI		
135.UU0	-.173U	
18U.UU0	-.113U	-.167U
225.UU0	-.19U0	

MACH (1) = .599 BETA (2) = .08U

X/LNM	.2U0	.4U0
PHI		
135.UU0	-.165U	
18U.UU0	-.123U	-.158U
225.UU0	-.163U	

MACH (1) = .599 BETA (3) = 5.26U

X/LNM	.2U0	.4U0
PHI		
135.UU0	-.171U	
18U.UU0	-.155U	-.165U
225.UU0	-.185U	

MACH (2) = .897 BETA (1) = -4.98U

X/LNM	.2U0	.4U0
PHI		
135.UU0	-.19U0	
18U.UU0	-.153U	-.181U
225.UU0	-.192U	

MACH (2) = .896 BETA (2) = .U8U

X/LNM	.2U0	.4U0
PHI		
135.UU0	-.188U	
18U.UU0	-.161U	-.183U
225.UU0	-.194U	

MACH (2) = .899 BETA (3) = 5.33U

X/LNM	.2U0	.4U0
PHI		
135.UU0	-.206U	
18U.UU0	-.191U	-.202U
225.UU0	-.22U0	

AMES 11-7X7 OA12 O2A OMS NOZZLE (RBFE28) (01 MAY 73)

REFERENCE DATA

SREF = 2.421X SQ.FT. XMRP = 28.53XX INCHES
LREF = 39.849X INCHES YMRP = .XXXX INCHES
BREF = 39.849X INCHES ZMRP = .XXXX INCHES
SCALE = .03XX SCALE

PARAMETRIC DATA

ALPHA = .XXX RUDDER = .XXX
ELEVON = -2X.XXX RUDFLR = .XXX

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .597 BETA (1) = -7.97X

X/LNM	.2XX	.4XX
PHI		
135.XXX	-.226X	
18X.XXX	-.143X	-.18XX
225.XXX	-.214X	

MACH (1) = .596 BETA (2) = -3.94X

X/LNM	.2XX	.4XX
PHI		
135.XXX	-.189X	
18X.XXX	-.133X	-.166X
225.XXX	-.196X	

MACH (1) = .598 BETA (3) = .0XX

X/LNM	.2XX	.4XX
PHI		
135.XXX	-.169X	
18X.XXX	-.142X	-.161X
225.XXX	-.179X	

MACH (1) = .595 BETA (4) = 4.19X

X/LNM	.2XX	.4XX
PHI		
135.XXX	-.176X	
18X.XXX	-.159X	-.171X
225.XXX	-.192X	

MACH (1) = .598 BETA (5) = 8.29X

X/LNM	.2XX	.4XX
PHI		
135.XXX	-.183X	
18X.XXX	-.162X	-.175X
225.XXX	-.189X	

MACH (2) = .9XX BETA (1) = -8.XXX

X/LNM	.2XX	.4XX
PHI		
135.XXX	-.224X	
18X.XXX	-.165X	-.192X
225.XXX	-.213X	

MACH (2) = .897 BETA (2) = -4.XXX

X/LNM	.2XX	.4XX
PHI		
135.XXX	-.188X	
18X.XXX	-.16XX	-.182X
225.XXX	-.191X	

AMES 11-7X7 OA12 OBA OMS NOZZLE (RBFE28)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .9[illegible] BETA (3) = .[illegible]

X/LNM	.2[illegible]	.4[illegible]
PHI		
135.[illegible]	-.191[illegible]	
180.[illegible]	-.165[illegible]	-.18[illegible]
225.[illegible]	-.191[illegible]	

MACH (2) = .9[illegible] BETA (4) = 4.24[illegible]

X/LNM	.2[illegible]	.4[illegible]
PHI		
135.[illegible]	-.2[illegible]	
180.[illegible]	-.186[illegible]	-.2[illegible]
225.[illegible]	-.212[illegible]	

MACH (2) = .9[illegible] BETA (5) = 8.4[illegible]

X/LNM	.2[illegible]	.4[illegible]
PHI		
135.[illegible]	-.221[illegible]	
180.[illegible]	-.185[illegible]	-.222[illegible]
225.[illegible]	-.231[illegible]	

AMES 11-7Ø7 OA12 O2A OMS NOZZLE (RBPE29) (Ø1 MAY 73)

REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000
ELEVON = -20.000 RUDFLR = .000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -8.030

X/LNM	.200	.400
PHI		
135.000	-.2460	
180.000	-.1800	-.2110
225.000	-.2280	

MACH (1) = .598 BETA (2) = -3.980

X/LNM	.200	.400
PHI		
135.000	-.2200	
180.000	-.1660	-.1760
225.000	-.2070	

MACH (1) = .598 BETA (3) = .080

X/LNM	.200	.400
PHI		
135.000	-.1890	
180.000	-.1530	-.1570
225.000	-.2050	

MACH (1) = .600 BETA (4) = 4.160

X/LNM	.200	.400
PHI		
135.000	-.1730	
180.000	-.1640	-.1630
225.000	-.1900	

MACH (1) = .597 BETA (5) = 8.250

X/LNM	.200	.400
PHI		
135.000	-.1640	
180.000	-.1530	-.1740
225.000	-.1970	

MACH (2) = .898 BETA (1) = -8.130

X/LNM	.200	.400
PHI		
135.000	-.2440	
180.000	-.1880	-.2110
225.000	-.2230	

MACH (2) = .902 BETA (2) = -4.020

X/LNM	.200	.400
PHI		
135.000	-.1960	
180.000	-.1640	-.1800
225.000	-.1920	

AMES 11-7U7 OA12 O2A OMS NOZZLE (RBPE29)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .899 BETA (3) = .080

X/LNM	.200	.400
PHI		
135.000	-.1900	
180.000	-.1680	-.1790
225.000	-.1920	

MACH (2) = .897 BETA (4) = 4.210

X/LNM	.200	.400
PHI		
135.000	-.2020	
180.000	-.1860	-.1890
225.000	-.2060	

MACH (2) = .896 BETA (5) = 8.340

X/LNM	.200	.400
PHI		
135.000	-.2130	
180.000	-.2030	-.2180
225.000	-.2190	

AMES 11-7ft OA12 OBA OMS NOZZLE (MBPE30) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 10.000 RUDDER = .000
ELEVON = -20.000 RUDFLR = .000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -8.050

X/LNM	.200	.400
PHI		
135.000	-.2640	
180.000	-.2490	-.2410
225.000	-.2470	

MACH (1) = .599 BETA (2) = -3.980

X/LNM	.200	.400
PHI		
135.000	-.2330	
180.000	-.1780	-.1920
225.000	-.2220	

MACH (1) = .598 BETA (3) = .080

X/LNM	.200	.400
PHI		
135.000	-.1990	
180.000	-.1220	-.1650
225.000	-.1870	

MACH (1) = .598 BETA (4) = 4.150

X/LNM	.200	.400
PHI		
135.000	-.2020	
180.000	-.1810	-.1770
225.000	-.2250	

MACH (1) = .598 BETA (5) = 8.230

X/LNM	.200	.400
PHI		
135.000	-.1890	
180.000	-.1840	-.1800
225.000	-.2110	

MACH (2) = .901 BETA (1) = -8.160

X/LNM	.200	.400
PHI		
135.000	-.2560	
180.000	-.2050	-.2270
225.000	-.2310	

MACH (2) = .901 BETA (2) = -4.040

X/LNM	.200	.400
PHI		
135.000	-.2120	
180.000	-.1690	-.1970
225.000	-.2070	

AMES 11-7X7 OA12 O2A OMS NOZZLE (RBPE30)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .903 BETA (3) = .080

X/LNM	.200	.400
PHI		
135.000	-.2010	
180.000	-.1620	-.1940
225.000	-.2090	

MACH (2) = .902 BETA (4) = 4.190

X/LNM	.200	.400
PHI		
135.000	-.2210	
180.000	-.2420	-.2110
225.000	-.2180	

MACH (2) = .905 BETA (5) = 8.320

X/LNM	.200	.400
PHI		
135.000	-.2180	
180.000	-.2490	-.2250
225.000	-.2290	

AMES 11-7ft OA12 O2A OMS NOZZLE (RBPE31) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 15.000 RUDDER = .000
ELEVON = -20.000 RUDFLR = .000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -8.040

X/LNM	.200	.400
PHI		
135.000	-.2880	
180.000	-.2620	-.2680
225.000	-.2630	

MACH (1) = .598 BETA (2) = -3.980

X/LNM	.200	.400
PHI		
135.000	-.2520	
180.000	-.1870	-.2100
225.000	-.2250	

MACH (1) = .598 BETA (3) = .080

X/LNM	.200	.400
PHI		
135.000	-.2320	
180.000	-.1350	-.1780
225.000	-.2210	

MACH (1) = .599 BETA (4) = 4.170

X/LNM	.200	.400
PHI		
135.000	-.2050	
180.000	-.1740	-.1820
225.000	-.2230	

MACH (1) = .597 BETA (5) = 8.240

X/LNM	.200	.400
PHI		
135.000	-.1960	
180.000	-.1890	-.1950
225.000	-.2090	

MACH (2) = .898 BETA (1) = -8.130

X/LNM	.200	.400
PHI		
135.000	-.2560	
180.000	-.2060	-.2340
225.000	-.2420	

MACH (2) = .901 BETA (2) = -4.020

X/LNM	.200	.400
PHI		
135.000	-.2140	
180.000	-.1670	-.2100
225.000	-.2220	

AMES 11-7U7 OA12 O2A OMS NOZZLE (RBFE31)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .901 BETA (3) = .080

X/LNM	.200	.400
PHI		
135.000	-.1980	
180.000	-.2020	-.2190
225.000	-.2280	

MACH (2) = .897 BETA (4) = 4.200

X/LNM	.200	.400
PHI		
135.000	-.2230	
180.000	-.1900	-.2260
225.000	-.2300	

MACH (2) = .898 BETA (5) = 8.330

X/LNM	.200	.400
PHI		
135.000	-.2220	
180.000	-.1930	-.2400
225.000	-.2500	

AMES 11-7X7 OA12 02A OMS NOZZLE (RBPE32) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 20.000 RUDDER = .000
ELEVON = -20.000 RUDFLR = .000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -7.980

X/LNM	.200	.400
PHI		
135.000	-.3140	
180.000	-.2570	-.2810
225.000	-.2920	

MACH (1) = .597 BETA (2) = -3.950

X/LNM	.200	.400
PHI		
135.000	-.2930	
180.000	-.1070	-.2050
225.000	-.2580	

MACH (1) = .599 BETA (3) = .070

X/LNM	.200	.400
PHI		
135.000	-.2360	
180.000	-.1490	-.2380
225.000	-.2650	

MACH (1) = .598 BETA (4) = 4.190

X/LNM	.200	.400
PHI		
135.000	-.2320	
180.000	-.2100	-.2330
225.000	.2550	

MACH (1) = .600 BETA (5) = 8.290

X/LNM	.200	.400
PHI		
135.000	-.2480	
180.000	-.2320	-.2490
225.000	-.2660	

MACH (2) = .902 BETA (1) = -8.070

X/LNM	.200	.400
PHI		
135.000	-.3330	
180.000	-.3000	-.3120
225.000	-.3490	

MACH (2) = .898 BETA (2) = -4.000

X/LNM	.200	.400
PHI		
135.000	-.3290	
180.000	-.2530	-.2980
225.000	-.3240	

AMES 11-7U7 OA12 O2A OMS NOZZLE (RBPE32)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .9U8 BETA (3) = .07U

X/LRM	.2U	.4U
PHI		
135.UU	-.237U	
18U.UU	-.275U	-.284U
225.UU	-.297U	

MACH (2) = .897 BETA (4) = 4.22U

X/LRM	.2U	.4U
PHI		
135.UU	-.263U	
18U.UU	-.236U	-.281U
225.UU	-.297U	

MACH (2) = .9U1 BETA (5) = 8.36U

X/LRM	.2U	.4U
PHI		
135.UU	-.264U	
18U.UU	-.242U	-.285U
225.UU	-.3U2U	

AMES 11-707 OA12 O2A OMS NOZZLE (RBPE33) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = -4.000 RUDDER = .000
ELEVON = .000 RUDFLR = 40.000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -4.910

X/LNM	.200	.400
PHI		
135.000	.0770	
180.000	.2240	-.1870
225.000	-.2780	

MACH (1) = .599 BETA (2) = .080

X/LNM	.200	.400
PHI		
135.000	-.2080	
180.000	.0160	-.2560
225.000	-.2700	

MACH (1) = .598 BETA (3) = 5.280

X/LNM	.200	.400
PHI		
135.000	-.2750	
180.000	-.1350	-.2620
225.000	-.2590	

MACH (2) = .899 BETA (1) = -4.990

X/LNM	.200	.400
PHI		
135.000	.2080	
180.000	.4050	-.1870
225.000	-.3000	

MACH (2) = .899 BETA (2) = .080

X/LNM	.200	.400
PHI		
135.000	-.1550	
180.000	.1590	-.2650
225.000	-.2870	

MACH (2) = .900 BETA (3) = 5.350

X/LNM	.200	.400
PHI		
135.000	-.2870	
180.000	.0010	-.2580
225.000	-.2740	

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AMES 11-7U7 OA12 O2A OMS NOZZLE

REFERENCE DATA

PARAMETRIC DATA

SREF = 2.421U SQ.FT. XMRP = 28.53UU INCHES
LREF = 39.849U INCHES YMRP = .UUUU INCHES
BREF = 39.849U INCHES ZMRP = .UUUU INCHES
SCALE = .U3UU SCALE

ALPHA = .UUU RUDDER = .UUU
ELEVON = .UUU RUDFLR = 45.UUU

SECTION (1)OMS NOZZLE

DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -7.99U

X/LNM	.2UU	.4UU
PHI		
135.UUU	.U56U	
18U.UUU	.167U	-.144U
225.UUU	-.271U	

MACH (1) = .599 BETA (2) = -3.95U

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.U62U	
18U.UUU	.U91U	-.21UU
225.UUU	-.265U	

MACH (1) = .599 BETA (3) = .1U9

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.192U	
18U.UUU	-.U39U	-.247U
225.UUU	-.265U	

MACH (1) = .599 BETA (4) = 4.2UU

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.26UU	
18U.UUU	-.128U	-.248U
225.UUU	-.253U	

MACH (1) = .599 BETA (5) = 8.31U

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.283U	
18U.UUU	-.187U	-.273U
225.UUU	-.267U	

MACH (2) = .899 BETA (1) = -8.1UU

X/LNM	.2UU	.4UU
PHI		
135.UUU	.319U	
18U.UUU	.4U9U	-.119U
225.UUU	-.328U	

MACH (2) = .897 BETA (2) = -4.U1U

X/LNM	.2UU	.4UU
PHI		
135.UUU	.U89U	
18U.UUU	.252U	-.185U
225.UUU	-.273U	

AMES 11-7X7 OA12 OBA OMS NOZZLE (RBPE34)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .898 BETA (3) = .08

X/LNM	.2	.4
PHI		
135.000	-.132	
180.000	.194	-.242
225.000	-.272	

MACH (2) = .896 BETA (4) = 4.25

X/LNM	.2	.4
PHI		
135.000	-.223	
180.000	.000	-.246
225.000	-.268	

MACH (2) = .901 BETA (5) = 8.43

X/LNM	.2	.4
PHI		
135.000	-.269	
180.000	-.074	-.279
225.000	-.311	

AMES 11-7?? OA12 O2A OMS NOZZLE (RBPE35) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 29.530 INCHES
LREF = 39.849 INCHES YMRP = .000 INCHES
BREF = 39.849 INCHES ZMRP = .000 INCHES
SCALE = .[illegible] SCALE

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000
ELEVON = .000 RUDFLP = 40.000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -8.04[illegible]

X/LNM	.20	.40
PHI		
135.000	-.151	
180.000	.041	-.184
225.000	-.258	

MACH (1) = .5[illegible] BETA (2) = -3.98

X/LNM	.20	.40
PHI		
135.000	-.162	
180.000	-.021	-.210
225.000	-.249	

MACH (1) = .599 BETA (3) = .08

X/LNM	.20	.40
PHI		
135.000	-.199	
180.000	-.088	-.222
225.000	-.249	

MACH (1) = .599 BETA (4) = 4.17

X/LNM	.20	.40
PHI		
135.000	-.252	
180.000	-.168	-.248
225.000	-.247	

MACH (1) = .60[illegible] BETA (5) = 8.28

X/LNM	.20	.40
PHI		
135.000	-.275	
180.000	-.142	-.266
225.000	-.265	

MACH (2) = .9[illegible] BETA (1) = -8.16

X/LNM	.20	.40
PHI		
135.000	.128	
180.000	.257	-.142
225.000	-.311	

MACH (2) = .9[illegible] BETA (2) = -4.[illegible]

X/LNM	.20	.40
PHI		
135.000	-.038	
180.000	.134	-.257
225.000	-.279	

AMES 11-7x7 OA12 OBA OMS NOZZLE (PBPE39)

SECTION ' 1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .914 BETA (3) = .68% X/LNM .2% .4%
PHI
135.0% -.098%
180.0% .053% -.205%
225.0% -.257%

MACH (2) = .902 BETA (4) = 4.22% X/LNM .2% .4%
PHI
135.0% -.196%
180.0% -.029% -.242%
225.0% -.259%

MACH (2) = .898 BETA (5) = 8.37% X/LNM .2% .4%
PHI
135.0% -.119%
180.0% -.151% -.248%
225.0% -.285%

AMES 11-7X7 OA12 OBA OMS NOZZLE (RBPE36) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.53[illegible] INCHES
LREF = 39.849[illegible] INCHES YMRP = .[illegible] INCHES
BREF = 39.849[illegible] INCHES ZMRP = .[illegible] INCHES
SCALE = .03[illegible] SCALE

PARAMETRIC DATA

ALPHA = 15.[illegible] RUDDER = .[illegible]
ELEVON = .[illegible] RUDFLR = 45.[illegible]

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .998 BETA (1) = -8.07[illegible]

X/LNM	.20[illegible]	.40[illegible]
PHI		
135.[illegible]	-.261[illegible]	
180.[illegible]	-.036[illegible]	-.190[illegible]
225.[illegible]	-.261[illegible]	

MACH (1) = .998 BETA (2) = -3.99[illegible]

X/LNM	.20[illegible]	.40[illegible]
PHI		
135.[illegible]	-.215[illegible]	
180.[illegible]	-.037[illegible]	-.205[illegible]
225.[illegible]	-.251[illegible]	

MACH (1) = .999 BETA (3) = .08[illegible]

X/LNM	.20[illegible]	.40[illegible]
PHI		
135.[illegible]	-.193[illegible]	
180.[illegible]	-.059[illegible]	-.204[illegible]
225.[illegible]	-.241[illegible]	

MACH (1) = .601 BETA (4) = 4.16[illegible]

X/LNM	.20[illegible]	.40[illegible]
PHI		
135.[illegible]	-.230[illegible]	
180.[illegible]	-.168[illegible]	-.238[illegible]
225.[illegible]	-.237[illegible]	

MACH (1) = .999 BETA (5) = 8.23[illegible]

X/LNM	.20[illegible]	.40[illegible]
PHI		
135.[illegible]	-.248[illegible]	
180.[illegible]	-.181[illegible]	-.258[illegible]
225.[illegible]	-.253[illegible]	

MACH (2) = .903 BETA (1) = -8.17[illegible]

X/LNM	.20[illegible]	.40[illegible]
PHI		
135.[illegible]	-.125[illegible]	
180.[illegible]	.091[illegible]	-.183[illegible]
225.[illegible]	-.304[illegible]	

MACH (2) = .903 BETA (2) = -4.05[illegible]

X/LNM	.20[illegible]	.40[illegible]
PHI		
135.[illegible]	-.206[illegible]	
180.[illegible]	.003[illegible]	-.218[illegible]
225.[illegible]	-.270[illegible]	

AMES 11-7ft OA12 OEA OMS NOZZLE (RBPE36)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .899 BETA (3) = .080

X/LNM	.200	.400
PHI		
135.000	-.1710	
180.000	-.0320	-.2120
225.000	-.2590	

MACH (2) = .897 BETA (4) = 4.260

X/LNM	.200	.400
PHI		
135.000	-.2230	
180.000	-.0690	-.2400
225.000	-.2520	

MACH (2) = .902 BETA (5) = 8.330

X/LNM	.200	.400
PHI		
135.000	-.2540	
180.000	-.1970	-.2890
225.000	-.3010	

AMES 11-7U7 OA12 02A OMS NOZZLE (RBFE37) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.53[illegible] INCHES
LREF = 39.84[illegible] INCHES YMRP = .[illegible] INCHES
BREF = 39.84[illegible] INCHES ZMRP = .[illegible] INCHES
SCALE = .[illegible] SCALE

PARAMETRIC DATA

ALPHA = 15.[illegible] RUDDER = .[illegible]
ELEVON = .[illegible] RUDFLR = [illegible].[illegible]

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .596 BETA (1) = -8.05[illegible]

X/LNM	.2[illegible]	.4[illegible]
PHI		
135.[illegible]	-.3080	
180.[illegible]	-.0790	-.2140
225.[illegible]	-.3010	

MACH (1) = .598 BETA (2) = -3.99[illegible]

X/LNM	.2[illegible]	.4[illegible]
PHI		
135.[illegible]	-.2680	
180.[illegible]	-.0630	-.2110
225.[illegible]	-.2640	

MACH (1) = .598 BETA (3) = .0[illegible]

X/LNM	.2[illegible]	.4[illegible]
PHI		
135.[illegible]	-.1920	
180.[illegible]	-.2090	-.2810
225.[illegible]	-.2750	

MACH (1) = .596 BETA (4) = 4.16[illegible]

X/LNM	.2[illegible]	.4[illegible]
PHI		
135.[illegible]	-.2310	
180.[illegible]	-.1730	-.2630
225.[illegible]	-.2610	

MACH (1) = .597 BETA (5) = 8.25[illegible]

X/LNM	.2[illegible]	.4[illegible]
PHI		
135.[illegible]	-.2740	
180.[illegible]	-.2510	-.2770
225.[illegible]	-.2790	

MACH (2) = .899 BETA (1) = -8.15[illegible]

X/LNM	.2[illegible]	.4[illegible]
PHI		
135.[illegible]	-.1750	
180.[illegible]	.0160	-.1930
225.[illegible]	-.3190	

MACH (2) = .897 BETA (2) = -4.03[illegible]

X/LNM	.2[illegible]	.4[illegible]
PHI		
135.[illegible]	-.1440	
180.[illegible]	.0440	-.2110
225.[illegible]	-.3030	

AMES 11-7ft OA12 02A OMS NOZZLE (RBPE37)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .900 BETA (3) = .070

X/LNM	.200	.400
PHI		
135.000	-.1160	
180.000	-.1390	-.2750
225.000	-.2960	

MACH (2) = .902 BETA (4) = 4.200

X/LNM	.200	.400
PHI		
135.000	-.2570	
190.000	-.1300	-.2670
225.000	-.2910	

MACH (2) = .902 BETA (5) = 8.330

X/LNM	.200	.400
PHI		
135.000	-.2750	
180.000	-.2460	-.3140
225.000	-.3250	

AMES 11-FT OA12 OPS NOZZLE (RBPE38) (01 MAY 73)

REFERENCE DATA

SREF = 2.421 SQ.FT. XMRP = 28.530 INCHES
LREF = 39.849 INCHES YMRP = .000 INCHES
BREF = 39.849 INCHES ZMRP = .000 INCHES
SCALE = .038 SCALE

PARAMETRIC DATA

ALPHA = 20.000 RUDDER = .000
ELEVON = .000 RUDFLR = 40.000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -8.000

X/LNM	.200	.400
PHI		
135.000	-.2980	
180.000	-.0810	-.1910
225.000	-.3380	

MACH (1) = .598 BETA (2) = -3.960

X/LNM	.200	.400
PHI		
135.000	-.2140	
180.000	.0220	-.1260
225.000	-.3650	

MACH (1) = .597 BETA (3) = .080

X/LNM	.200	.400
PHI		
135.000	-.1690	
180.000	-.2850	-.3400
225.000	-.3230	

MACH (1) = .597 BETA (4) = 4.190

X/LNM	.200	.400
PHI		
135.000	-.2530	
180.000	-.1940	-.2960
225.000	-.2980	

MACH (1) = .598 BETA (5) = 8.300

X/LNM	.200	.400
PHI		
135.000	-.3030	
180.000	-.2700	-.3260
225.000	-.3190	

MACH (2) = .901 BETA (1) = -8.080

X/LNM	.200	.400
PHI		
135.000	-.2650	
180.000	-.0970	-.2140
225.000	-.3640	

MACH (2) = .899 BETA (2) = -3.990

X/LNM	.200	.400
PHI		
135.000	-.2520	
180.000	-.0040	-.2360
225.000	-.3760	

AMES 11-7ft OA12 OEA OMS NOZZLE (RBPE38)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .901 BETA (3) = .68D

X/LNM	.2D	.4D
PHI		
135.0D	-.093D	
180.0D	-.128D	-.311D
225.0D	-.342D	

MACH (2) = .90D BETA (4) = 4.22D

X/LNM	.2D	.4D
PHI		
135.0D	-.283D	
180.0D	-.049D	-.279D
225.0D	-.335D	

MACH (2) = .899 BETA (5) = 8.36D

X/LNM	.2D	.4D
PHI		
135.0D	-.28D	
180.0D	-.186D	-.316D
225.0D	-.355D	

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 O2A OMS NOZZLE (RBPE39) (01 MAY 73)

REFERENCE DATA

SREF = 2.421U SQ.FT. XMRP = 28.53U0 INCHES
LREF = 39.849U INCHES YMRP = .UUUU INCHES
BREF = 39.849U INCHES ZMRP = .UUUU INCHES
SCALE = .U3UU SCALE

PARAMETRIC DATA

BETA = .UUU RUDDER = .UUU
ELEVON = .UUU RUDFLR = .UUU

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 1.U99 ALPHA (1) = -4.55U

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.285U	
18U.UUU	-.21UU	-.367U
225.UUU	-.38UU	

MACH (1) = 1.1UU ALPHA (2) = -3.52U

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.286U	
18U.UUU	-.225U	-.367U
225.UUU	-.372U	

MACH (1) = 1.1UU ALPHA (3) = -1.49U

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.3U6U	
18U.UUU	-.257U	-.366U
225.UUU	-.371U	

MACH (1) = 1.U98 ALPHA (4) = .54U

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.326U	
18U.UUU	-.291U	-.365U
225.UUU	-.366U	

MACH (1) = 1.1UU ALPHA (5) = 2.51U

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.336U	
18U.UUU	-.312U	-.37UU
225.UUU	-.369U	

MACH (1) = 1.U99 ALPHA (6) = 4.05U

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.344U	
18U.UUU	-.311U	-.367U
225.UUU	-.368U	

MACH (1) = 1.1UU ALPHA (7) = 6.63U

X/LNM	.2UU	.4UU
PHI		
135.UUU	-.36UU	
18U.UUU	-.32UU	-.375U
225.UUU	-.378U	

AMES 11-7ft OA12 OEA OMS NOZZLE (RBPE39)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 1.100 ALPHA (8) = 8.590

X/LNM	.200	.400
PHI		
135.000	-.3620	
180.000	-.3610	-.3900
225.000	-.3870	

MACH (1) = 1.099 ALPHA (9) = 9.970

X/LNM	.200	.400
PHI		
135.000	-.3700	
180.000	-.3760	-.3930
225.000	-.3950	

MACH (1) = 1.101 ALPHA (10) = 14.970

X/LNM	.200	.400
PHI		
135.000	-.4250	
180.000	-.4250	-.4410
225.000	-.4400	

MACH (2) = 1.247 ALPHA (1) = -4.440

X/LNM	.200	.400
PHI		
135.000	.0480	
180.000	.0500	-.2930
225.000	-.3600	

MACH (2) = 1.248 ALPHA (2) = -3.470

X/LNM	.200	.400
PHI		
135.000	.0460	
180.000	-.0150	-.3010
225.000	-.3580	

MACH (2) = 1.247 ALPHA (3) = -1.470

X/LNM	.200	.400
PHI		
135.000	-.0820	
180.000	-.1020	-.3110
225.000	-.3460	

MACH (2) = 1.248 ALPHA (4) = .520

X/LNM	.200	.400
PHI		
135.000	-.1370	
180.000	-.1560	-.3260
225.000	-.3430	

MACH (2) = 1.250 ALPHA (5) = 2.580

X/LNM	.200	.400
PHI		
135.000	-.1880	
180.000	-.1980	-.3340
225.000	-.3440	

AMES 11-7X7 OA12 O2A OMS NOZZLE (FBFE39)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 1.248 ALPHA (6) = 4.570

X/LNM	.200	.400
PHI		
135.000	-.2430	
180.000	-.2050	-.3330
225.000	-.3460	

MACH (2) = 1.248 ALPHA (7) = 6.670

X/LNM	.200	.400
PHI		
135.000	-.2770	
180.000	-.2190	-.3380
225.000	-.3520	

MACH (2) = 1.249 ALPHA (8) = 8.660

X/LNM	.200	.400
PHI		
135.000	-.2850	
180.000	-.2570	-.3570
225.000	-.3600	

MACH (2) = 1.246 ALPHA (9) = 10.030

X/LNM	.200	.400
PHI		
135.000	-.2760	
180.000	-.2990	-.3650
225.000	-.3640	

MACH (2) = 1.244 ALPHA (10) = 14.980

X/LNM	.200	.400
PHI		
135.000	-.3620	
180.000	-.3250	-.3990
225.000	-.3960	

MACH (3) = 1.398 ALPHA (1) = -4.420

X/LNM	.200	.400
PHI		
135.000	.3100	
180.000	.2970	-.1460
225.000	-.3440	

MACH (3) = 1.395 ALPHA (2) = -3.420

X/LNM	.200	.400
PHI		
135.000	.2640	
180.000	.2450	-.1670
225.000	-.3450	

MACH (3) = 1.398 ALPHA (3) = -1.430

X/LNM	.200	.400
PHI		
135.000	.1500	
180.000	.1660	-.2270
225.000	-.3340	

AMES 11-707 OA12 02A OMS NOZZLE (RBPE39)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 1.397 ALPHA (4) = .520

X/LNM	.200	.400
PHI		
135.000	.0470	
180.000	.0590	-.2560
225.000	-.3280	

MACH (3) = 1.396 ALPHA (5) = 2.600

X/LNM	.200	.400
PHI		
135.000	-.0220	
180.000	-.0140	-.2690
225.000	-.3230	

MACH (3) = 1.397 ALPHA (6) = 4.570

X/LNM	.200	.400
PHI		
135.000	-.0730	
180.000	-.0420	-.2750
225.000	-.3250	

MACH (3) = 1.399 ALPHA (7) = 6.440

X/LNM	.200	.400
PHI		
135.000	-.1400	
180.000	-.0680	-.2660
225.000	-.3250	

MACH (3) = 1.398 ALPHA (8) = 8.710

X/LNM	.200	.400
PHI		
135.000	-.1520	
180.000	-.0890	-.2860
225.000	-.3410	

MACH (3) = 1.397 ALPHA (9) = 10.110

X/LNM	.200	.400
PHI		
135.000	-.1380	
180.000	-.1610	-.3220
225.000	-.3380	

MACH (3) = 1.394 ALPHA (10) = 15.030

X/LNM	.200	.400
PHI		
135.000	-.2710	
180.000	-.2240	-.3480
225.000	-.3500	

AMES 11-707 OA12 OBA OMS NOZZLE (RBPE40) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = .500 RUDDER = .000
ELEVON = .000 RUDFLR = .000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 1.099 BETA (1) = -8.080

X/LNM	.200	.400
PHI		
135.000	.0900	
180.000	.0270	-.3100
225.000	-.4110	

MACH (1) = 1.101 BETA (2) = -4.000

X/LNM	.200	.400
PHI		
135.000	-.1820	
180.000	-.1830	-.3600
225.000	-.3890	

MACH (1) = 1.100 BETA (3) = -1.960

X/LNM	.200	.400
PHI		
135.000	-.2480	
180.000	-.2180	-.3620
225.000	-.3750	

MACH (1) = 1.099 BETA (4) = .080

X/LNM	.200	.400
PHI		
135.000	-.3200	
180.000	-.2870	-.3640
225.000	-.3660	

MACH (1) = 1.099 BETA (5) = 2.150

X/LNM	.200	.400
PHI		
135.000	-.3500	
180.000	-.3410	-.3670
225.000	-.3680	

MACH (1) = 1.100 BETA (6) = 4.230

X/LNM	.200	.400
PHI		
135.000	-.3590	
180.000	-.3560	-.3680
225.000	-.3670	

MACH (1) = 1.099 BETA (7) = 8.390

X/LNM	.200	.400
PHI		
135.000	-.3750	
180.000	-.3730	-.3750
225.000	-.3850	

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPE4U)

AMES 11-7U7 OA12 O2A OMS NOZZLE

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 1.250 BETA (1) = -8.040

X/LNM	.200	.400
PHI		
135.000	.6740	
180.000	.4110	-.0040
225.000	-.4020	

MACH (2) = 1.247 BETA (2) = -3.970

X/LNM	.200	.400
PHI		
135.000	.2760	
180.000	.1350	-.2430
225.000	-.3700	

MACH (2) = 1.247 BETA (3) = -1.940

X/LNM	.200	.400
PHI		
135.000	.0310	
180.000	-.0180	-.2920
225.000	-.3530	

MACH (2) = 1.246 BETA (4) = .080

X/LNM	.200	.400
PHI		
135.000	-.1410	
180.000	-.1550	-.3260
225.000	-.3460	

MACH (2) = 1.245 BETA (5) = 2.140

X/LNM	.200	.400
PHI		
135.000	-.2590	
180.000	-.2440	-.3440
225.000	-.3430	

MACH (2) = 1.245 BETA (6) = 4.210

X/LNM	.200	.400
PHI		
135.000	-.3080	
180.000	-.3090	-.3540
225.000	-.3510	

MACH (2) = 1.247 BETA (7) = 8.340

X/LNM	.200	.400
PHI		
135.000	-.3450	
180.000	-.3240	-.3580
225.000	-.3650	

MACH (3) = 1.396 BETA (1) = -8.040

X/LNM	.200	.400
PHI		
135.000	.7490	
180.000	.3960	.5590
225.000	-.2010	

AMES 11-707 OA12 OBA OMS NOZZLE (RBPE40)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 1.399 BETA (2) = -3.970

X/LNM	.200	.400
PHI		
135.000	.5670	
180.000	.3710	.0040
225.000	-.3340	

MACH (3) = 1.397 BETA (3) = .080

X/LNM	.200	.400
PHI		
135.000	.0740	
180.000	.0790	-.2460
225.000	-.3280	

MACH (3) = 1.394 BETA (4) = 4.210

X/LNM	.200	.400
PHI		
135.000	-.2220	
180.000	-.1140	-.3120
225.000	-.3400	

MACH (3) = 1.392 BETA (5) = 8.360

X/LNM	.200	.400
PHI		
135.000	-.3230	
180.000	-.1310	-.3410
225.000	-.3580	

AMES 11-707 OA12 O2A OMS NOZZLE (RBPE41) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = -4.000 RUDDER = -10.000
ELEVON = .000 RUDFLR = .000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -4.910

PHI	X/LNM .200	.400
135.000	-.1830	
180.000	-.1340	-.1960
225.000	-.2020	

MACH (1) = .598 BETA (2) = .090

PHI	X/LNM .200	.400
135.000	-.2010	
180.000	-.1610	-.2100
225.000	-.2160	

MACH (1) = .600 BETA (3) = 5.260

PHI	X/LNM .200	.400
135.000	-.2250	
180.000	-.1940	-.2270
225.000	-.2390	

MACH (2) = .900 BETA (1) = -4.990

PHI	X/LNM .200	.400
135.000	-.2180	
180.000	-.1900	-.2370
225.000	-.2340	

MACH (2) = .900 BETA (2) = .090

PHI	X/LNM .200	.400
135.000	-.2300	
180.000	-.2090	-.2350
225.000	-.2340	

MACH (2) = .901 BETA (3) = 5.360

PHI	X/LNM .200	.400
135.000	-.2360	
180.000	-.2260	-.2550
225.000	-.2520	

AMES 11-707 OA12 02A OMS NOZZLE (RBPE42) (01 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES
SCALE =	.0300 SCALE		

PARAMETRIC DATA

ALPHA =	-4.000	RUDDER =	-20.000
ELEVON =	.000	RUDFLR =	.000

SECTION (1)OMS NOZZLE

DEPENDENT VARIABLE CP

MACH (1) = .596 BETA (1) = -4.900

X/LNM	.200	.400
PHI		
135.000	-.1840	
180.000	-.1480	-.2170
225.000	-.2160	

MACH (1) = .596 BETA (2) = .100

X/LNM	.200	.400
PHI		
135.000	-.2120	
180.000	-.1820	-.2310
225.000	-.2230	

MACH (1) = .598 BETA (3) = 5.290

X/LNM	.200	.400
PHI		
135.000	-.2300	
180.000	-.2150	-.2460
225.000	-.2480	

MACH (2) = .304 BETA (1) = -4.980

X/LNM	.200	.400
PHI		
135.000	-.2250	
180.000	-.2030	-.2530
225.000	-.2560	

MACH (2) = .900 BETA (2) = .110

X/LNM	.200	.400
PHI		
135.000	-.2380	
180.000	-.2160	-.2490
225.000	-.2490	

MACH (2) = .901 BETA (3) = 5.360

X/LNM	.200	.400
PHI		
135.000	-.2650	
180.000	-.2350	-.2710
225.000	-.2700	

AMES 11-707 OA12 O2A OMS NOZZLE (RBPE43) (01 MAY 73)

REFERENCE DATA

SREF =	2.4210	SQ.FT.	XMRP =	28.5300	INCHES
LREF =	39.8490	INCHES	YMRP =	.0000	INCHES
BREF =	39.8490	INCHES	ZMRP =	.0000	INCHES
SCALE =	.0300	SCALE			

PARAMETRIC DATA

ALPHA =	-4.000	RUDDER =	.000
ELEVON =	10.000	RUDFLR =	.000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -4.910

X/LNM	.200	.400
PHI		
135.000	-.1920	
180.000	-.1220	-.2330
225.000	-.2320	

MACH (1) = .599 BETA (2) = .080

X/LNM	.200	.400
PHI		
135.000	-.2370	
180.000	-.1820	-.2310
225.000	-.2340	

MACH (1) = .597 BETA (3) = 5.270

X/LNM	.200	.400
PHI		
135.000	-.2610	
180.000	-.2220	-.2420
225.000	-.2590	

MACH (2) = .897 BETA (1) = -4.980

X/LNM	.200	.400
PHI		
135.000	-.2560	
180.000	-.2230	-.2650
225.000	-.2580	

MACH (2) = .896 BETA (2) = .080

X/LNM	.200	.400
PHI		
135.000	-.2440	
180.000	-.2220	-.2520
225.000	-.2490	

MACH (2) = .903 BETA (3) = 5.340

X/LNM	.200	.400
PHI		
135.000	-.2740	
180.000	-.2620	-.2810
225.000	-.2720	

AMES 11-7U7 OA12 O2A OMS NOZZLE (RBPE44) (01 MAY 73)

REFERENCE DATA

SREF	=	2.4215	SQ.FT.	XMRP	= 28.5300 INCHES
LREF	=	39.8490	INCHES	YMRP	= .0000 INCHES
BREF	=	39.8490	INCHES	ZMRP	= .0000 INCHES
SCALE	=	.0300	SCALE		

PARAMETRIC DATA

ALPHA	= -4.000	RUDDER	= .000
ELEVON	= -10.000	RUDFLR	= .000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .597 BETA (1) = -4.910

X/LNM	.200	.400
PHI		
135.000	-.1600	
180.000	-.0980	-.1690
225.000	-.1730	

MACH (1) = .597 BETA (2) = .080

X/LNM	.200	.400
PHI		
135.000	-.1720	
180.000	-.1340	-.1670
225.000	-.1740	

MACH (1) = .597 BETA (3) = 5.270

X/LNM	.200	.400
PHI		
135.000	-.1770	
180.000	-.1560	-.1850
225.000	-.1920	

MACH (2) = .903 BETA (1) = -4.980

X/LNM	.200	.400
PHI		
135.000	-.2020	
180.000	-.1660	-.2110
225.000	-.2110	

MACH (2) = .902 BETA (2) = .090

X/LNM	.200	.400
PHI		
135.000	-.2000	
180.000	-.1850	-.2020
225.000	-.2110	

MACH (2) = .904 BETA (3) = 5.340

X/LNM	.200	.400
PHI		
135.000	-.2220	
180.000	-.1840	-.2200
225.000	-.2240	

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 02A OMS NOZZLE (RBPE45) (01 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES
SCALE =	.0300 SCALE		

PARAMETRIC DATA

ALPHA =	-4.000	RUDDER =	.000
ELEVON =	.000	RUDFLR =	.000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .601 BETA (1) = -4.910

X/LNM	.200	.400
PHI		
135.000	-.1690	
180.000	-.0970	-.1960
225.000	-.1980	

MACH (1) = .597 BETA (2) = .090

X/LNM	.200	.400
PHI		
135.000	-.2030	
180.000	-.1570	-.1900
225.000	-.2000	

MACH (1) = .598 BETA (3) = 5.280

X/LNM	.200	.400
PHI		
135.000	-.2190	
180.000	-.1930	-.2210
225.000	-.2190	

MACH (2) = .901 BETA (1) = -5.000

X/LNM	.200	.400
PHI		
135.000	-.2220	
180.000	-.1880	-.2310
225.000	-.2320	

MACH (2) = .902 BETA (2) = .090

X/LNM	.200	.400
PHI		
135.000	-.2320	
180.000	-.2050	-.2300
225.000	-.2330	

MACH (2) = .900 BETA (3) = 5.350

X/LNM	.200	.400
PHI		
135.000	-.2270	
180.000	-.1960	-.2410
225.000	-.2330	

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPE46) (01 MAY 73)

AMES 11-707 OA12 OEA OMS NOZZLE

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BRLF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0312 SCALE

PARAMETRIC DATA

BETA = .000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = .600 ALPHA (1) =-15.850

X/LNM	.200	.400
PHI		
135.000	-.2520	
180.000	-.0820	-.2260
225.000	-.2320	

MACH (1) = .599 ALPHA (2) =-10.490

X/LNM	.200	.400
PHI		
135.000	-.2330	
180.000	-.1480	-.2130
225.000	-.2230	

MACH (1) = .599 ALPHA (3) = -5.200

X/LNM	.200	.400
PHI		
135.000	-.2140	
180.000	-.1740	-.2040
225.000	-.2140	

MACH (1) = .599 ALPHA (4) = .050

X/LNM	.200	.400
PHI		
135.000	-.2050	
180.000	-.1710	-.1970
225.000	-.2070	

MACH (2) = .900 ALPHA (1) =-16.390

X/LNM	.200	.400
PHI		
135.000	-.2770	
180.000	-.2270	-.2710
225.000	-.2720	

MACH (2) = .901 ALPHA (2) =-10.840

X/LNM	.200	.400
PHI		
135.000	-.2600	
180.000	-.2340	-.2630
225.000	-.2600	

MACH (2) = .900 ALPHA (3) = -5.380

X/LNM	.200	.400
PHI		
135.000	-.2400	
180.000	-.2100	-.2350
225.000	-.2310	

AMES 11-707 OA12 O2A OMS NOZZLE (RBPE46)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .902 ALPHA (4) = .060

X/LNM	.200	.400
PHI		
135.000	-.2160	
180.000	-.1915	-.2160
225.000	-.2180	

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPE47) (01 MAY 73)

AMES 11-707 OA12 02A OMS NOZZLE

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0310 SCALE

PARAMETRIC DATA

ALPHA = -5.000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

SECTION (1)OMS NOZZLE

DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) =-10.300

X/LNM	.200	.400
PHI		
135.000	-.1100	
180.000	-.0440	-.1930
225.000	-.2140	

MACH (1) = .597 BETA (2) = -5.190

X/LNM	.200	.400
PHI		
135.000	-.1670	
180.000	-.1050	-.2010
225.000	.2030	

MACH (1) = .597 BETA (3) = 5.000

X/LNM	.200	.400
PHI		
135.000	-.2390	
180.000	-.1970	-.2170
225.000	-.2350	

MACH (1) = .599 BETA (4) = 10.080

X/LNM	.200	.400
PHI		
135.000	-.2710	
180.000	-.2250	-.2570
225.000	-.2580	

MACH (2) = .898 BETA (1) =-10.440

X/LNM	.200	.400
PHI		
135.000	-.1550	
180.000	-.1180	-.2470
225.000	-.2630	

MACH (2) = .904 BETA (2) = -5.270

X/LNM	.200	.400
PHI		
135.000	-.2330	
180.000	-.1980	-.2510
225.000	-.2420	

MACH (2) = .902 BETA (3) = 5.070

X/LNM	.200	.400
PHI		
135.000	-.2500	
180.000	-.2410	-.2490
225.000	-.2580	

AMES 11-7D7 OA12 O2A OMS NOZZLE (RBPE47)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .898 BETA (4) = 10.220

X/LNM	.200	.400
PHI		
135.000	-.2990	
180.000	-.3000	-.3020
225.000	-.2880	

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBFE48) (01 MAY 73)

AMES 11-707 OA12 02A OMS NOZZLE

PARAMETRIC DATA

ALPHA = -10.000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0350 SCALE

SECTION (1)OMS NOZZLE

DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) =-10.280

X/LNM	.200	.400
PHI		
135.000	.0140	
180.000	.0660	-.1900
225.000	-.2440	

MACH (1) = .598 BETA (2) = -5.180

X/LNM	.200	.400
PHI		
135.000	-.1530	
180.000	-.0420	-.2040
225.000	-.2160	

MACH (1) = .597 BETA (3) = 5.020

X/LNM	.200	.400
PHI		
135.000	-.2510	
180.000	-.1890	-.2280
225.000	-.2330	

MACH (1) = .599 BETA (4) = 10.120

X/LNM	.200	.400
PHI		
135.000	-.2680	
180.000	-.2000	-.2620
225.000	-.2540	

MACH (2) = .901 BETA (1) =-10.460

X/LNM	.200	.400
PHI		
135.000	-.1490	
180.000	-.0820	-.2660
225.000	-.2790	

MACH (2) = .898 BETA (2) = -5.270

X/LNM	.200	.400
PHI		
135.000	-.2430	
180.000	-.1940	-.2690
225.000	-.2680	

MACH (2) = .901 BETA (3) = 5.110

X/LNM	.200	.400
PHI		
135.000	-.2880	
180.000	-.2450	-.2770
225.000	-.2720	

AMES 11-707 OA12 OEA OMS NOZZLE (R5PE40)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = .900 BETA (4) = 10.300

X/LNM	.200	.400
PHI		
135.000	-.3080	
180.000	-.3250	-.3220
225.000	-.2850	

AMES 11-707 OA12 OEA BODY FLAP (REPFU1) (31 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .03[illegible] SCALE

PARAMETRIC DATA

BETA = .[illegible] RUDDER = .[illegible]
ELEVON = .[illegible] RUDFLR = .[illegible]

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .6[illegible] ALPHA (1) = -4.410 X/LB 1.039
PHI
.000 -.1480
40.000 -.1560

MACH (1) = .599 ALPHA (2) = .050 X/LB 1.039
PHI
.000 -.1490
40.000 -.1520

MACH (1) = .6[illegible] ALPHA (3) = 5.050 X/LB 1.039
PHI
.000 -.1420
40.000 -.1430

MACH (1) = .6[illegible] ALPHA (4) = 10.040 X/LB 1.039
PHI
.000 -.1240
40.000 -.1330

MACH (1) = .598 ALPHA (5) = 15.020 X/LB 1.039
PHI
.000 -.1240
40.000 -.1280

MACH (1) = .599 ALPHA (6) = 20.000 X/LB 1.039
PHI
.000 -.1160
40.000 -.1410

MACH (1) = .597 ALPHA (7) = 22.580 X/LB 1.039
PHI
.000 -.1220
40.000 -.1510

MACH (2) = .905 ALPHA (1) = -4.580 X/LB 1.039
PHI
.000 -.1290
40.000 -.1520

AMES 11-707 OA12 OEA BODY FLAP (RBPFU1)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = .901 ALPHA (2) = -.010

X/LB	1.039
PHI	
.000	-.1300
45.000	-.1430

MACH (2) = .904 ALPHA (3) = 4.980

X/LB	1.039
PHI	
.000	-.1280
45.000	-.1440

MACH (2) = .906 ALPHA (4) = 9.990

X/LB	1.039
PHI	
.000	-.1440
45.000	-.1.50

MACH (2) = .901 ALPHA (5) = 14.990

X/LB	1.039
PHI	
.000	-.1690
45.000	-.1940

MACH (2) = .900 ALPHA (6) = 20.020

X/LB	1.039
PHI	
.000	-.1720
45.000	-.2580

MACH (2) = .902 ALPHA (7) = 25.040

X/LB	1.039
PHI	
.000	-.1450
45.000	-.2850

AMES 11-7ft OA12 02A BODY FLAP (RBPFU2) (01 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHA =	.000	RUDDER =	.000
ELEVON =	.000	RUDFLR =	.000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) =-10.010

X/LB	1.039
PHI	
.000	-.1630
40.000	-.1620

MACH (1) = .598 BETA (2) = -4.920

X/LB	1.039
PHI	
.000	-.1490
40.000	-.1440

MACH (1) = .598 BETA (3) = 5.230

X/LB	1.039
PHI	
.000	-.1530
40.000	-.1550

MACH (1) = .599 BETA (4) = 10.370

X/LB	1.039
PHI	
.000	-.1610
40.000	-.1640

MACH (2) = .804 BETA (1) =-10.150

X/LB	1.039
PHI	
.000	-.1620
40.000	-.1660

MACH (2) = .801 BETA (2) = -5.040

X/LB	1.039
PHI	
.000	- 1400
40.000	-.1430

MACH (2) = .903 BETA (3) = 5.290

X/LB	1.039
PHI	
.000	-.1970
40.000	-.1640

MACH (2) = .905 BETA (4) = 10.500

X/LB	1.039
PHI	
.000	-.1660
40.000	-.1950

AMES 11-7U7 UA12 O2A BODY FLAP (RBPF03) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 20.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .596 BETA (1) =-10.080 X/LB 1.039
PHI
.000 -.1530
40.000 -.1520

MACH (1) = .599 BETA (2) = -4.990 X/LB 1.039
PHI
.000 -.1400
40.000 -.1400

MACH (1) = .598 BETA (3) = 5.190 X/LB 1.039
PHI
.000 -.1440
40.000 -.1480

MACH (1) = .598 BETA (4) = 10.300 X/LB 1.039
PHI
.000 -.1520
40.000 -.1560

MACH (2) = .904 BETA (1) =-10.210 X/LB 1.039
PHI
.000 -.1990
40.000 -.1990

MACH (2) = .900 BETA (2) = -5.070 X/LB 1.039
PHI
.000 -.1380
40.000 -.1440

MACH (2) = .901 BETA (3) = 5.250 X/LB 1.039
PHI
.000 -.1340
40.000 -.1590

MACH (2) = .904 BETA (4) = 10.430 X/LB 1.039
PHI
.000 -.1580
40.000 -.1950

AMES 11-FT OA12 CBA BODY FLAP (REPFLW) (31 MAY 73)

REFERENCE DATA

SREF	=	2.4210 SQ.FT.	XMRP	=	20.5320 INCHES
LREF	=	59.0490 INCHES	YMRP	=	.0000 INCHES
BREF	=	59.0490 INCHES	ZMRP	=	.0000 INCHES
SCALE	=	.0392 SCALE			

PARAMETRIC DATA

ALPHA	=	10.000	RUDDER = .000
ELEVON	=	.000	RUDFLR = .000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .500 BETA (1) =-10.110 X/LB 1.039
PHI
.000 -.1440
40.000 -.1350

MACH (1) = .500 BETA (2) = -5.080 X/LB 1.039
PHI
.000 -.1310
40.000 -.1260

MACH (1) = .500 BETA (3) = 5.170 X/LB 1.039
PHI
.000 -.1340
40.000 -.1350

MACH (1) = .507 BETA (4) = 10.270 X/LB 1.039
PHI
.000 -.1480
40.000 -.1490

MACH (2) = .902 BETA (1) =-10.250 X/LB 1.039
PHI
.000 -.1630
40.000 -.1580

MACH (2) = .900 BETA (2) = -5.070 X/LB 1.039
PHI
.000 -.1540
40.000 -.1480

MACH (2) = .902 BETA (3) = 5.250 X/LB 1.039
PHI
.000 -.1470
40.000 -.1800

MACH (2) = .907 BETA (4) = 10.390 X/LB 1.039
PHI
.000 -.1810
40.000 -.2040

AMES 11-707 OA12 OBA BODY FLAP (REPFLG3) (31 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 20.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0920 SCALE

PARAMETRIC DATA

ALPHA = 15.000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .999 BETA (1) =-10.080 X/LB 1.039
PHI
.000 -.1270
40.000 -.1020

MACH (1) = .998 BETA (2) = -5.000 X/LB 1.039
PHI
.000 -.1210
40.000 -.1250

MACH (1) = .998 BETA (3) = 5.100 X/LB 1.039
PHI
.000 -.1260
40.000 -.1320

MACH (1) = .000 BETA (4) = 10.290 X/LB 1.039
PHI
.000 -.1380
40.000 -.2450

MACH (2) = .904 BETA (1) =-10.200 X/LB 1.039
PHI
.000 -.1020
40.000 -.1570

MACH (2) = .902 BETA (2) = -3.000 X/LB 1.039
PHI
.000 -.1630
40.000 -.1710

MACH (2) = .904 BETA (3) = 5.220 X/LB 1.039
PHI
.000 -.1040
40.000 -.2140

MACH (2) = .904 BETA (4) = 10.390 X/LB 1.039
PHI
.000 -.1980
40.000 -.2420

AMES 11-7ft OA12 OBA BODY FLAP (REFFDS) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 20.5310 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0500 SCALE

PARAMETRIC DATA

ALPHA = 20.000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

SECTION (1)BODY FLAP

DEPENDENT VARIABLE CP

MACH (1) = .596 BETA (1) =-10.030

X/LB	1.000
PHI	
.000	-.1120
40.000	-.1570

MACH (1) = .597 BETA (2) = -4.970

X/LB	1.000
PHI	
.000	-.1080
40.000	-.1180

MACH (1) = .597 BETA (3) = 5.210

X/LB	1.000
PHI	
.000	-.1210
40.000	-.1280

MACH (1) = .599 BETA (4) = 10.360

X/LB	1.000
PHI	
.000	-.1200
40.000	-.1440

MACH (2) = .904 BETA (1) =-10.110

X/LB	1.000
PHI	
.000	-.1570
40.000	-.2130

MACH (2) = .900 BETA (2) = -5.080

X/LB	1.000
PHI	
.000	-.1740
40.000	-.2460

MACH (2) = .904 BETA (3) = 5.280

X/LB	1.000
PHI	
.000	-.1770
40.000	-.2510

MACH (2) = .905 BETA (4) = 10.430

X/LB	1.000
PHI	
.000	-.1810
40.000	-.2490

AMES 11-7U7 OA12 OEA BODY FLAP (RBPFU7) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0340 SCALE

PARAMETRIC DATA

ALPHA = .000 RUDDER = -15.000
ELEVON = .000 RUDFLR = .000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -7.980 X/LB 1.039
PHI
.000 -.1630
40.000 -.1510

MACH (1) = .600 BETA (2) = -3.940 X/LB 1.039
PHI
.000 -.1550
40.000 -.1500

MACH (1) = .600 BETA (3) = .090 X/LB 1.039
PHI
.000 -.1550
40.000 -.1540

MACH (1) = .999 BETA (4) = 4.210 X/LB 1.039
PHI
.000 -.1570
40.000 -.1530

MACH (1) = .997 BETA (5) = 8.320 X/LB 1.039
PHI
.000 -.1610
40.000 -.1620

MACH (2) = .902 BETA (1) = -8.080 X/LB 1.039
PHI
.000 -.1510
40.000 -.1520

MACH (2) = .901 BETA (2) = -4.000 X/LB 1.039
PHI
.000 -.1370
40.000 -.1440

MACH (2) = .903 BETA (3) = .080 X/LB 1.039
PHI
.000 -.1350
40.000 -.1490

AMES 11-7U7 CA12 CBA BODY FLAP (TBFFL7)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = .902 BETA (4) = 4.280 X/LB 1.000
PHI
.000 -.1410
45.000 -.1580

MACH (2) = .908 BETA (5) = 0.440 X/LB 1.000
PHI
.000 -.1580
45.000 -.1830

AMES 11-FT OA12 OEA BODY FLAP (BDYFLG) (15 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 20.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = -30.000
ELEVON = .000 RUDFLR = .000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -8.040 X/LB 1.039
PHI
.000 -.1430
40.000 -.1410

MACH (1) = .599 BETA (2) = -3.970 X/LB 1.039
PHI
.000 -.1460
40.000 -.1430

MACH (1) = .600 BETA (3) = .090 X/LB 1.039
PHI
.000 -.1470
40.000 -.1430

MACH (1) = .601 BETA (4) = 4.180 X/LB 1.039
PHI
.000 -.1460
40.000 -.1510

MACH (1) = .601 BETA (5) = 8.280 X/LB 1.039
PHI
.000 -.1590
40.000 -.1620

MACH (2) = .900 BETA (1) = -8.140 X/LB 1.039
PHI
.000 -.1410
40.000 -.1440

MACH (2) = .903 BETA (2) = -4.030 X/LB 1.039
PHI
.000 -.1320
40.000 -.1430

MACH (2) = .901 BETA (3) = .090 X/LB 1.039
PHI
.000 -.1290
40.000 -.1430

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 OEA BODY FLAP .8DFF=0)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = .903 BETA (4) = 4.220

X/LB	1.039
PHI	
.000	-.1320
45.000	-.1580

MACH (2) = .901 BETA (5) = 8.370

X/LB	1.039
PHI	
.000	-.1470
45.000	-.1830

AMES 11-7X7 OA12 O2A BODY FLAP (RBPFD9) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 10.000 RUDDER = -10.000
ELEVON = .000 RUDFLR = .000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -8.080 X/LB 1.039
PHI
.000 -.1360
40.000 -.1340

MACH (1) = .601 BETA (2) = -3.980 X/LB 1.039
PHI
.000 -.1370
40.000 -.1360

MACH (1) = .600 BETA (3) = .090 X/LB 1.039
PHI
.000 -.1330
40.000 -.1330

MACH (1) = .599 BETA (4) = 4.170 X/LB 1.039
PHI
.000 -.1410
40.000 -.1490

MACH (1) = .599 BETA (5) = 8.240 X/LB 1.039
PHI
.000 -.1410
40.000 -.1480

MACH (2) = .904 BETA (1) = -8.160 X/LB 1.039
PHI
.000 -.1630
40.000 -.1590

MACH (2) = .902 BETA (2) = -4.040 X/LB 1.039
PHI
.000 -.1500
40.000 -.1540

MACH (2) = .899 BETA (3) = .090 X/LB 1.039
PHI
.000 -.1440
40.000 -.1640

AMES 11-7U7 OA12 OBA BODY FLAP (RBPFU9)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = .898 BETA (4) = 4.2UU

	X/LB 1.039
PHI	
.UUU	-.1490
4U.UUU	-.1740

MACH (2) = .900 BETA (5) = 8.33U

	X/LB 1.039
PHI	
.UUU	-.1580
4U.UUU	-.1990

AMES 11-FT OA12 02A BODY FLAP (RDFFLR, (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 20.5306 INCHES
LREF = 39.8495 INCHES YMRP = .0000 INCHES
BREF = 39.8495 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 15.000 RUDDER = -10.000
ELEVON = .000 RUDFLR = .000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -8.040

X/LB	1.039
PHI	
.000	-.1280
40.000	-.1220

MACH (1) = .599 BETA (2) = -3.980

X/LB	1.039
PHI	
.000	-.1280
40.000	-.1170

MACH (1) = .598 BETA (3) = .080

X/LB	1.039
PHI	
.000	-.1310
40.000	-.1280

MACH (1) = .596 BETA (4) = 4.170

X/LB	1.039
PHI	
.000	-.1280
40.000	-.1310

MACH (1) = .601 BETA (5) = 8.250

X/LB	1.039
PHI	
.000	-.1350
40.000	-.1440

MACH (2) = .902 BETA (1) = -8.130

X/LB	1.039
PHI	
.000	-.1570
40.000	-.1660

MACH (2) = .899 BETA (2) = -4.020

X/LB	1.039
PHI	
.000	-.1670
40.000	-.1800

MACH (2) = .901 BETA (3) = .080

X/LB	1.039
PHI	
.000	-.1730
40.000	-.2020

AMES 11-7U7 OA12 OBA BODY FLAP (RBFF1U)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = .9U1 BETA (4) = 4.2U0 X/LB 1.U39
PHI
.UUU -.167U
45.UUU -.2U6U

MACH (2) = .9U0 BETA (5) = 0.33U X/LB 1.U39
PHI
.UUU -.16UU
45.UUU -.2U3U

DATE 18 SEP 73

TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 OBA BODY FLAP

(RBPF11) (01 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES
SCALE =	.0300 SCALE		

PARAMETRIC DATA

ALPHA =	20.000	RUDDER =	-10.000
ELEVON =	.000	RUDFLR =	.000

SECTION (1)BODY FLAP

DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -7.990

X/LB	1.039
PHI	
.000	-.1120
40.000	-.1150

MACH (1) = .598 BETA (2) = -3.960

X/LB	1.039
PHI	
.000	-.1230
40.000	-.1240

MACH (1) = .598 BETA (3) = .090

X/LB	1.039
PHI	
.000	-.1190
40.000	-.1390

MACH (1) = .598 BETA (4) = 4.190

X/LB	1.039
PHI	
.000	-.1270
40.000	-.1340

MACH (1) = .800 BETA (5) = 8.310

X/LB	1.039
PHI	
.000	-.1150
40.000	-.1220

MACH (2) = .903 BETA (1) = -8.060

X/LB	1.039
PHI	
.000	-.1640
40.000	-.2220

MACH (2) = .900 BETA (2) = -3.980

X/LB	1.039
PHI	
.000	-.1770
40.000	-.2460

MACH (2) = .900 BETA (3) = .090

X/LB	1.039
PHI	
.000	-.1750
40.000	-.2490

AMES 11-7D7 OA12 O2A BODY FLAP (RBPF11)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = .900 BETA (4) = 4.230 X/LB 1.039

PHI	
.000	-.1740
45.000	-.2475

MACH (2) = .901 BETA (5) = 8.360 X/LB 1.039

PHI	
.000	-.1680
45.000	-.2330

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPF12) (01 MAY 73)

AMES 11-707 OA:2 02A BODY FLAP

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHA =	.000	RUDDER =	-20.000
ELEVON =	.000	RUDFLR =	.000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -7.970

X/LB	1.039
PHI	
.000	-.1640
40.000	-.1500

MACH (1) = .600 BETA (2) = -3.990

X/LB	1.039
PHI	
.000	-.1630
40.000	-.1540

MACH (1) = .599 BETA (3) = .100

X/LB	1.039
PHI	
.000	-.1620
40.000	-.1620

MACH (1) = .601 BETA (4) = 4.210

X/LB	1.039
PHI	
.000	-.1650
40.000	-.1700

MACH (1) = .599 BETA (5) = 8.330

X/LB	1.039
PHI	
.000	-.1680
40.000	-.1760

MACH (2) = .901 BETA (1) = -8.080

X/LB	1.039
PHI	
.000	-.1520
40.000	-.1640

MACH (2) = .900 BETA (2) = -4.000

X/LB	1.039
PHI	
.000	-.1400
40.000	-.1520

MACH (2) = .900 BETA (3) = .100

X/LB	1.039
PHI	
.000	-.1380
40.000	-.1540

AMES 11-7U7 OA12 C2A BODY FLAP (RBPF12)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = .900 BETA (4) = 4.280 X/LB 1.039

PHI	
.000	-.1420
45.000	-.1895

MACH (2) = .903 BETA (5) = 8.450 X/LB 1.039

PHI	
.000	-.1675
45.000	-.2175

AMES 11-7U7 OA12 72A BODY FLAP (RBPF13) (01 MAY 73)

REFERENCE DATA

SREF =	2.421U	SQ.FT.	XMRP =	28.53U0	INCHES
LREF =	39.849U	INCHES	YMRP =	.UUUU	INCHES
BREF =	39.849U	INCHES	ZMRP =	.UUUU	INCHES
SCALE =	.U3UU	SCALE			

PARAMETRIC DATA

ALPHA =	5.UUU	RUDDER =	-2U.UUU
ELEVON =	.UUU	RUDFLR =	.UUU

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -8.03U

X/LB	1.039
PHI	
.UUU	-.1580
4U.UUU	-.1490

MACH (1) = .599 BETA (2) = -3.97U

X/LB	1.039
PHI	
.UUU	-.1540
4U.UUU	-.1480

MACH (1) = .598 BETA (3) = .15U

X/LB	1.039
PHI	
.UUU	-.1530
4U.UUU	-.1560

MACH (1) = .599 BETA (4) = 4.18U

X/LB	1.039
PHI	
.UUU	-.1560
4U.UUU	-.1610

MACH (1) = .600 BETA (5) = 8.27U

X/LB	1.039
PHI	
.UUU	-.1560
4U.UUU	-.1750

MACH (2) = .9U7 BETA (1) = -8.14U

X/LB	1.039
PHI	
.UUU	-.1450
4U.UUU	-.1520

MACH (2) = .899 BETA (2) = -4.02U

X/LB	1.039
PHI	
.UUU	-.1390
4U.UUU	-.1530

MACH (2) = .9U1 BETA (3) = .1UU

X/LB	1.039
PHI	
.UUU	-.1350
4U.UUU	-.1540

AMES 11-7U7 OA12 O2A BODY FLAP (RBPF13)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = .903 BETA (4) = 4.230

X/LB	1.039
PHI	
.000	-.1450
40.000	-.1710

MACH (2) = .902 BETA (5) = 8.380

X/LB	1.039
PHI	
.000	-.1530
40.000	-.1990

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPF14) (01 MAY 73)

AMES 11-7U7 OA12 OBA BODY FLAP

PARAMETRIC DATA

ALPHA = 10.000 RUDDER = -20.000
ELEVON = .000 RUDFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5350 INCHES
LREF = 59.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0350 SCALE

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -8.080 X/LB 1.039
PHI
.000 -.1410
45.000 -.1370

MACH (1) = .600 BETA (2) = -3.980 X/LB 1.039
PHI
.000 -.1500
45.000 -.1400

MACH (1) = .599 BETA (3) = .090 X/LB 1.039
PHI
.000 -.1350
45.000 -.1390

MACH (1) = .599 BETA (4) = 4.170 X/LB 1.039
PHI
.000 -.1390
45.000 -.1500

MACH (1) = .602 BETA (5) = 8.290 X/LB 1.039
PHI
.000 -.1440
45.000 -.1580

MACH (2) = .902 BETA (1) = -8.150 X/LB 1.039
PHI
.000 -.1590
45.000 -.1570

MACH (2) = .901 BETA (2) = -4.060 X/LB 1.039
PHI
.000 -.1560
45.000 -.1610

MACH (2) = .899 BETA (3) = .090 X/LB 1.039
PHI
.000 -.1550
45.000 -.1710

AMES 11-7U7 OA12 O2A BODY FLAP (RBPF14)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = .900 BETA (4) = 4.215

X/LB	1.039
PHI	
.000	-.1600
40.000	-.1880

MACH (2) = .946 BETA (5) = 8.350

X/LB	1.039
PHI	
.000	-.1610
40.000	-.2210

AMES 11-707 OA12 OBA BODY FLAP (RBPF15) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 15.000 RUDDER = -20.000
ELEVON = .000 RUDFLR = .000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -8.040

X/LB	1.039
PHI	
.000	-.1310
40.000	-.1160

MACH (1) = .599 BETA (2) = -3.970

X/LB	1.039
PHI	
.000	-.1370
40.000	-.1240

MACH (1) = .600 BETA (3) = .100

X/LB	1.039
PHI	
.000	-.1370
40.000	-.1410

MACH (1) = .598 BETA (4) = 4.180

X/LB	1.039
PHI	
.000	-.1290
40.000	-.1460

MACH (1) = .599 BETA (5) = 8.260

X/LB	1.039
PHI	
.000	-.1350
40.000	-.1430

MACH (2) = .901 BETA (1) = -8.120

X/LB	1.039
PHI	
.000	-.1660
40.000	-.1740

MACH (2) = .900 BETA (2) = -4.010

X/LB	1.039
PHI	
.000	-.1670
40.000	-.1880

MACH (2) = .899 BETA (3) = .090

X/LB	1.039
PHI	
.000	-.1680
40.000	-.1940

AMES 11-707 OA12 02A BODY FLAP (RBPF15)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = .899 BETA (4) = 4.210

X/LB	1.039
PHI	
.000	-.1630
40.000	-.2010

MACH (2) = .898 BETA (5) = 8.340

X/LB	1.039
PHI	
.000	-.1610
40.000	-.2190

AMES 11-7ft OA12 OPA BODY FLAP (RBPF16) (02 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5390 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 20.000 RUDDER = -20.000
ELEVON = .000 RUDFLR = .000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -7.990 X/LB 1.039
PHI
.000 -.1170
40.000 -.1160

MACH (1) = .598 BETA (2) = -3.950 X/LB 1.039
PHI
.000 -.1300
40.000 -.1330

MACH (1) = .601 BETA (3) = .100 X/LB 1.039
PHI
.000 -.1240
40.000 -.1510

MACH (1) = .597 BETA (4) = 4.200 X/LB 1.039
PHI
.000 -.1220
40.000 -.1540

MACH (1) = .604 BETA (5) = 8.320 X/LB 1.039
PHI
.000 -.1150
40.000 -.1220

MACH (2) = .898 BETA (1) = -8.060 X/LB 1.039
PHI
.000 -.1650
40.000 -.2210

MACH (2) = .897 BETA (2) = -3.980 X/LB 1.039
PHI
.000 -.1780
40.000 -.2450

MACH (2) = .897 BETA (3) = .090 X/LB 1.039
PHI
.000 -.1800
40.000 -.2600

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPF16)

AMES 11-707 OA12 O2A BODY FLAP

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = .896 BETA (4) = 4.240

X/LB	1.039
PHI	
.000	-.1780
40.000	-.2520

MACH (2) = .899 BETA (5) = 8.370

X/LB	1.039
PHI	
.000	-.1640
40.000	-.2260

AMES 11-707 OA12 O2A BODY FLAP (RBPF17) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000
ELEVON = 10.000 RUDFLR = .000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .597 BETA (1) =-10.000

X/LB	1.039
PHI	
.000	-.1510
40.000	-.1510

MACH (1) = .598 BETA (2) = .080

X/LB	1.039
PHI	
.000	-.1410
40.000	-.1340

MACH (1) = .600 BETA (3) = 10.370

X/LB	1.039
PHI	
.000	-.1560
40.000	-.1490

MACH (2) = .901 BETA (1) =-10.120

X/LB	1.039
PHI	
.000	-.1690
40.000	-.1920

MACH (2) = .899 BETA (2) = .080

X/LB	1.039
PHI	
.000	-.1410
40.000	-.1250

MACH (2) = .903 BETA (3) = 10.490

X/LB	1.039
PHI	
.000	-.1680
40.000	-.1900

AMES 11-7U7 OA12 O2A BODY FLAP (RBPF18) (01 MAY 73)

REFERENCE DATA

SREF =	2.4210	SQ.FT.	XMRP =	28.5300	INCHES
LREF =	39.8490	INCHES	YMRP =	.0000	INCHES
BREF =	39.8490	INCHES	ZMRP =	.0000	INCHES
SCALE =	.0300	SCALE			

PARAMETRIC DATA

ALPHA =	5.000	RUDDER =	.000
ELEVON =	10.000	RUDFLR =	.000

SECTION (1)BODY FLAP

DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) =-10.070

X/LB	1.039
PHI	
.000	-.1380
40.000	-.1330

MACH (1) = .596 BETA (2) = .080

X/LB	1.039
PHI	
.000	-.1310
40.000	-.1220

MACH (1) = .598 BETA (3) = 10.300

X/LB	1.039
PHI	
.000	-.1470
40.000	-.1410

MACH (2) = .899 BETA (1) =-10.190

X/LB	1.039
PHI	
.000	-.1550
40.000	-.1500

MACH (2) = .901 BETA (2) = .080

X/LB	1.039
PHI	
.000	-.1270
40.000	-.122[illegible]

MACH (2) = .895 BETA (3) = 10.420

X/LB	1.039
PHI	
.000	-.1500
40.000	-.1820

AMES 11-7U7 OA12 O2A BODY FLAP (RBPF19) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 10.000 RUDDER = .000
ELEVON = 10.000 RUDFLR = .000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) =-10.110

X/LB	1.039
PHI	
.000	-.1290
40.000	-.1220

MACH (1) = .597 BETA (2) = .080

X/LB	1.039
PHI	
.000	-.1090
40.000	-.1070

MACH (1) = .599 BETA (3) = 10.270

X/LB	1.039
PHI	
.000	-.1310
40.000	-.1250

MACH (2) = .904 BETA (1) =-10.210

X/LB	1.039
PHI	
.000	-.1740
40.000	-.1760

MACH (2) = .898 BETA (2) = .090

X/LB	1.039
PHI	
.000	-.1560
40.000	-.1590

MACH (2) = .897 BETA (3) = 10.390

X/LB	1.039
PHI	
.000	-.1520
40.000	-.1920

AMES 11-707 OA12 OBA BODY FLAP (RBPF2U) (31 MAY 73)

REFERENCE DATA

SREF = 2.421U SQ.FT. XMRP = 28.53U0 INCHES
LREF = 39.849U INCHES YMRP = .0000 INCHES
BREF = 39.849U INCHES ZMRP = .0000 INCHES
SCALE = .03U0 SCALE

PARAMETRIC DATA

ALPHA = 15.[illegible] RUDDER = .[illegible]
ELEVON = 1[illegible] RUDFLR = .[illegible]

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .998 BETA (1) =-10.080 X/LB 1.039
PHI
.000 -.1280
40.000 -.1080

MACH (1) = .999 BETA (2) = .080 X/LB 1.039
PHI
.000 -.1220
40.000 -.0970

MACH (1) = .999 BETA (3) = 10.290 X/LB 1.039
PHI
.000 -.1180
40.000 -.1060

MACH (2) = .902 BETA (1) =-10.190 X/LB 1.039
PHI
.000 -.1540
40.000 -.1750

MACH (2) = .900 BETA (2) = .070 X/LB 1.039
PHI
.000 -.1510
40.000 -.1740

MACH (2) = .902 BETA (3) = 10.380 X/LB 1.039
PHI
.000 -.1430
40.000 -.2050

AMES 11-7U7 OA12 O2A BODY FLAP (RBPF21) (01 MAY 73)

REFERENCE DATA

SREF =	2.4219 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHA =	20.000	RUDDER =	.000
ELEVON =	10.000	RUDFLR =	.000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) =-10.030

X/LB	1.039
PHI	
.000	-.1130
40.000	-.0940

MACH (1) = .601 BETA (2) = .070

X/LB	1.039
PHI	
.000	-.1220
40.000	-.1330

MACH (1) = .598 BETA (3) = 10.370

X/LB	1.039
PHI	
.000	-.1130
40.000	-.1140

MACH (2) = .902 BETA (1) =-10.100

X/LB	1.039
PHI	
.000	-.1450
40.000	-.2040

MACH (2) = .894 BETA (2) = .080

X/LB	1.039
PHI	
.000	-.1640
40.000	-.2440

MACH (2) = .901 BETA (3) = 10.420

X/LB	1.039
PHI	
.000	-.1480
40.000	-.2250

AMES 11-7UT OA12 02A BODY FLAP (RBPF22) (01 MAY 7[illegible])

REFERENCE DATA

SREF =	2.421[illegible]	SQ.FT.	XMRP =	28.53[illegible]	INCHES
LREF =	39.849[illegible]	INCHES	YMRP =	.000[illegible]	INCHES
BREF =	39.849[illegible]	INCHES	ZMRP =	.000[illegible]	INCHES
SCALE =	.03[illegible]	SCALE			

PARAMETRIC DATA

ALPHA =	.000	RUDDER =	.000
ELEVON =	-10.000	RUDFLR =	.000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -7.970

X/LB	1.039
PHI	
.000	-.1600
40.000	-.1560

MACH (1) = .595 BETA (2) = -3.940

X/LB	1.039
PHI	
.000	-.1590
40.000	-.1520

MACH (1) = .597 BETA (3) = .080

X/LB	1.039
PHI	
.000	-.1540
40.000	-.1510

MACH (1) = .596 BETA (4) = 4.200

X/LB	1.039
PHI	
.000	-.1570
40.000	-.1540

MACH (1) = .597 BETA (5) = 8.300

X/LB	1.039
PHI	
.000	-.1700
40.000	-.1690

MACH (2) = .904 BETA (1) = -8.090

X/LB	1.039
PHI	
.000	-.1500
40.000	-.1600

MACH (2) = .902 BETA (2) = -4.000

X/LB	1.039
PHI	
.000	-.1300
40.000	-.1420

MACH (2) = .898 BETA (3) = .080

X/LB	1.039
PHI	
.000	-.1280
40.000	-.1440

AMES 11-7D7 OA12 O2A BODY FLAP (RBPF22)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = .899 BETA (4) = 4.250

X/LB	1.039
PHI	
.000	-.1330
40.000	-.1350

MACH (2) = .900 BETA (5) = 8.410

X/LB	1.039
PHI	
.000	-.1510
40.000	-.1670

DATE 16 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 OEA BODY FLAP (RDPF23) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0500 SCALE

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000
ELEVON = -10.000 RUDFLR = .000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -8.030 X/LB 1.039
PHI
.000 -.1600
40.000 -.1570

MACH (1) = .598 BETA (2) = -3.970 X/LB 1.039
PHI
.000 -.1560
40.000 -.1570

MACH (1) = .599 BETA (3) = .080 X/LB 1.039
PHI
.000 -.1520
40.000 -.1450

MACH (1) = .598 BETA (4) = 4.170 X/LB 1.039
PHI
.000 -.1530
40.000 -.1520

MACH (1) = .598 BETA (5) = 8.250 X/LB 1.039
PHI
.000 -.1500
40.000 -.1650

MACH (2) = .903 BETA (1) = -8.140 X/LB 1.039
PHI
.000 -.1460
40.000 -.1460

MACH (2) = .902 BETA (2) = -4.030 X/LB 1.039
PHI
.000 -.1220
40.000 -.1340

MACH (2) = .901 BETA (3) = .090 X/LB 1.039
PHI
.000 -.1170
40.000 -.1220

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPF23)

AMES 11-7D7 OA12 02A BODY FLAP

DEPENDENT VARIABLE CP

SECTION (1)BODY FLAP

MACH (2) = .903 BETA (4) = 4.220

X/LB	1.039
PHI	
.000	-.1200
40.000	-.1400

MACH (2) = .901 BETA (5) = 8.350

X/LB	1.039
PHI	
.000	-.1430
40.000	-.1580

AMES 11-7U7 OA12 O2A BODY FLAP (RBFF24) (01 MAY 73)

REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 10.000 RUDDER = .000
ELEVON = -10.000 RUDFLR = .000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .597 BETA (1) = -9.060 X/LB 1.039
PHI
.000 -.1550
40.000 -.1530

MACH (1) = .599 BETA (2) = -3.990 X/LB 1.039
PHI
.000 -.1510
40.000 -.1560

MACH (1) = .600 BETA (3) = .080 X/LB 1.039
PHI
.000 -.1430
40.000 -.1410

MACH (1) = .596 BETA (4) = 4.150 X/LB 1.039
PHI
.000 -.1420
40.000 -.1430

MACH (1) = .599 BETA (5) = 8.230 X/LB 1.039
PHI
.000 -.1510
40.000 -.1570

MACH (2) = .900 BETA (1) = -8.150 X/LB 1.039
PHI
.000 -.1710
40.000 -.1640

MACH (2) = .900 BETA (2) = -4.030 X/LB 1.039
PHI
.000 -.1360
40.000 -.1430

MACH (2) = .899 BETA (3) = .080 X/LB 1.039
PHI
.000 -.1120
40.000 -.1240

AMES 11-707 OA12 OEA BODY FLAP (RBPF24)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = .902 BETA (4) = 4.190 X/LB 1.039

PHI	
.000	.1490
40.000	-.1360

MACH (2) = .900 BETA (5) = 8.330 X/LB 1.039

PHI	
.000	-.1520
40.000	-.1570

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPF25) (01 MAY 73)

AMES 11-707 OA12 OEA BODY FLAP

PARAMETRIC DATA

ALPHA = 15.000 RUDDER = .000
ELEVON = -10.000 RUDFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -8.040 X/LB 1.039
PHI
.000 -.1450
40.000 -.1450

MACH (1) = .598 BETA (2) = -3.990 X/LB 1.039
PHI
.000 -.1360
40.000 -.1390

MACH (1) = .597 BETA (3) = .080 X/LB 1.039
PHI
.000 -.1380
40.000 -.1400

MACH (1) = .601 BETA (4) = 4.160 X/LB 1.039
PHI
.000 -.1360
40.000 -.1480

MACH (1) = .601 BETA (5) = 8.250 X/LB 1.039
PHI
.000 -.1430
40.000 -.1630

MACH (2) = .902 BETA (1) = -8.130 X/LB 1.039
PHI
.000 -.1780
40.000 -.1690

MACH (2) = .901 BETA (2) = -4.020 X/LB 1.039
PHI
.000 -.1910
40.000 -.1860

MACH (2) = .902 BETA (3) = .080 X/LB 1.039
PHI
.000 -.2560
40.000 -.2090

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPF25)

AMES 11-7U7 OA12 02A BODY FLAP

DEPENDENT VARIABLE CP

SECTION (1)BODY FLAP

MACH (2) = .898 BETA (4) = 4.19U

X/LB	1.039
PHI	
.000	-.1810
40.000	-.1760

MACH (2) = .899 BETA (5) = 8.33U

X/LB	1.039
PHI	
.000	-.1580
40.000	-.1650

AMES 11-/07 OA12 O2A BODY FLAP (RBPF26) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.530[illegible] INCHES
LREF = 39.849[illegible] INCHES YMRP = .[illegible] INCHES
BREF = 39.849[illegible] INCHES ZMRP = .[illegible] INCHES
SCALE = .[illegible] SCALE

PARAMETRIC DATA

ALPHA = [illegible] RUDDER = .[illegible]
ELEVCN = -[illegible] RUDFLR = .[illegible]

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .597 BETA (1) = -7.980

X/LB	1.039
PHI	
.000	-.1160
40.000	-.1360

MACH (1) = .598 BETA (2) = -3.960

X/LB	1.039
PHI	
.000	-.1160
40.000	-.1390

MACH (1) = .600 BETA (3) = .070

X/LB	1.039
PHI	
.000	-.1280
40.000	-.1480

MACH (1) = .598 BETA (4) = 4.190

X/LB	1.039
PHI	
.000	-.1180
40.000	-.1410

MACH (1) = .599 BETA (5) = 8.300

X/LB	1.039
PHI	
.000	-.1240
40.000	-.1400

MACH (2) = .903 BETA (1) = -8.070

X/LB	1.039
PHI	
.000	-.1750
40.000	-.1930

MACH (2) = .901 BETA (2) = -3.990

X/LB	1.039
PHI	
.000	-.2050
40.000	-.2260

MACH (2) = .899 BETA (3) = .080

X/LB	1.039
PHI	
.000	-.2080
40.000	-.2210

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPF26)

AMES 11-7U7 OA12 OBA BODY FLAP

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = .898 BETA (4) = 4.230

X/LB	1.039
PHI	
.000	-.1930
40.000	-.2290

MACH (2) = .904 BETA (5) = 8.360

X/LB	1.039
PHI	
.000	-.1910
40.000	-.2060

AMES 11-707 OA12 OBA BODY FLAP (RBPF27) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.53[illegible] INCHES
LREF = 39.849[illegible] INCHES YMRP = .[illegible] INCHES
BREF = 39.849[illegible] INCHES ZMRP = .[illegible] INCHES
SCALE = .03[illegible] SCALE

PARAMETRIC DATA

ALPHA = -4.[illegible] RUDDER = .[illegible]
ELEVON = -20.[illegible] RUDFLR = .[illegible]

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -4.910

X/LB	1.039
PHI	
.000	-.1750
40.000	-.1810

MACH (1) = .599 BETA (2) = .080

X/LB	1.039
PHI	
.000	-.1750
40.000	-.1660

MACH (1) = .599 BETA (3) = 5.260

X/LB	1.039
PHI	
.000	-.1780
40.000	-.1720

MACH (2) = .897 BETA (1) = -4.980

X/LB	1.039
PHI	
.000	-.1930
40.000	-.2230

MACH (2) = .896 BETA (2) = .080

X/LB	1.039
PHI	
.000	-.1850
40.000	-.2090

MACH (2) = .899 BETA (3) = 5.330

X/LB	1.039
PHI	
.000	-.1860
40.000	-.2130

AMES 11-7U7 OA12 O2A BODY FLAP (RBPF28) (01 MAY 73)

REFERENCE DATA

SREF =	2.4210	SQ.FT.	XMRP =	28.5300	INCHES
LREF =	39.8490	INCHES	YMRP =	.0000	INCHES
BREF =	39.8490	INCHES	ZMRP =	.0000	INCHES
SCALE =	.0300	SCALE			

PARAMETRIC DATA

ALPHA =	.000	RUDDER =	.000
ELEVON =	-20.000	RUDFLR =	.000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .597 BETA (1) = -7.970

X/LB	1.039
PHI	
.000	-.1920
40.000	-.1760

MACH (1) = .596 BETA (2) = -3.940

X/LB	1.039
PHI	
.000	-.1770
40.000	-.1700

MACH (1) = .598 BETA (3) = .090

X/LB	1.039
PHI	
.000	-.1750
40.000	-.1650

MACH (1) = .595 BETA (4) = 4.190

X/LB	1.039
PHI	
.000	-.1710
40.000	-.1640

MACH (1) = .598 BETA (5) = 8.290

X/LB	1.039
PHI	
.000	-.1880
40.000	-.1850

MACH (2) = .900 BETA (1) = -8.080

X/LB	1.039
PHI	
.000	-.1950
40.000	-.2150

MACH (2) = .897 BETA (2) = -4.000

X/LB	1.039
PHI	
.000	-.1940
40.000	-.1990

MACH (2) = .900 BETA (3) = .080

X/LB	1.039
PHI	
.000	-.1950
40.000	-.2010

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPF28)

AMES 11-7X7 OA12 02A BODY FLAP

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = .904 BETA (4) = 4.240

X/LB	1.039
PHI	
.000	-.2090
40.000	-.2260

MACH (2) = .904 BETA (5) = 8.400

X/LB	1.039
PHI	
.000	-.1830
40.000	-.2210

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPF29) (01 MAY 73)

AMES 11-7X7 OA12 02A BODY FLAP

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000
ELEVON = -20.000 RUDFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -8.030

X/LB	1.039
PHI	
.000	-.1760
40.000	-.1680

MACH (1) = .598 BETA (2) = -3.980

X/LB	1.039
PHI	
.000	-.1690
40.000	-.1620

MACH (1) = .598 BETA (3) = .080

X/LB	1.039
PHI	
.000	-.1610
40.000	-.1480

MACH (1) = .600 BETA (4) = 4.160

X/LB	1.039
PHI	
.000	-.1730
40.000	-.1700

MACH (1) = .597 BETA (5) = 8.250

X/LB	1.039
PHI	
.000	-.1810
40.000	-.1820

MACH (2) = .898 BETA (1) = -8.130

X/LB	1.039
PHI	
.000	-.1850
40.000	-.2010

MACH (2) = .902 BETA (2) = -4.020

X/LB	1.039
PHI	
.000	-.1710
40.000	-.1820

MACH (2) = .899 BETA (3) = .080

X/LB	1.039
PHI	
.000	-.1660
40.000	-.1830

AMES 11-7D7 OA12 O2A BODY FLAP (RBFF29)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = .897 BETA (4) = 4.210

X/LB	1.039
PHI	
.000	-.1640
40.000	-.1940

MACH (2) = .896 BETA (5) = 8.340

X/LB	1.039
PHI	
.000	-.1790
40.000	-.2020

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7X7 OA12 OBA BODY FLAP (RBPF30) (01 MAY 73)

REFERENCE DATA

SREF	=	2.421	SQ.FT.	XMRP	= 28.539 INCHES
LREF	=	39.849	INCHES	YMRP	= .000 INCHES
BREF	=	39.849	INCHES	ZMRP	= .000 INCHES
SCALE	=	.030	SCALE		

PARAMETRIC DATA

ALPHA	= 10.000	RUDDER	= .000
ELEVON	= -20.000	RUDFLR	= .000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .998 BETA (1) = -8.000

X/LB	1.039
PHI	
.000	-.164
45.000	-.163

MACH (1) = .999 BETA (2) = -3.980

X/LB	1.039
PHI	
.000	-.152
45.000	-.157

MACH (1) = .998 BETA (3) = .000

X/LB	1.039
PHI	
.000	-.157
45.000	-.161

MACH (1) = .998 BETA (4) = 4.150

X/LB	1.039
PHI	
.000	-.169
45.000	-.170

MACH (1) = .998 BETA (5) = 8.230

X/LB	1.039
PHI	
.000	-.170
45.000	-.186

MACH (2) = .901 BETA (1) = -8.160

X/LB	1.039
PHI	
.000	-.175
45.000	-.181

MACH (2) = .901 BETA (2) = -4.040

X/LB	1.039
PHI	
.000	-.170
45.000	-.173

MACH (2) = .903 BETA (3) = .000

X/LB	1.039
PHI	
.000	-.159
45.000	-.178

AMES 11-7U7 OA12 O2A BODY FLAP (RBPF3U)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = .902 BETA (4) = 4.190 X/LB 1.039

PHI	
.000	-.163U
45.000	-.19U0

MACH (2) = .905 BETA (5) = 8.320 X/LB 1.039

PHI	
.000	-.173U
45.000	-.203U

AMES 11-707 OA12 O2A BODY FLAP (RBPF31) (01 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES
SCALE =	.0300 SCALE		

PARAMETRIC DATA

ALPHA =	15.000	RUDDER =	.000
ELEVON =	-20.000	RUDFLR =	.000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -8.040

X/LB	1.039
PHI	
.000	-.1550
40.000	-.1540

MACH (1) = .598 BETA (2) = -3.980

X/LB	1.039
PHI	
.000	-.1410
40.000	-.1520

MACH (1) = .598 BETA (3) = .080

X/LB	1.039
PHI	
.000	-.1520
40.000	-.1670

MACH (1) = .599 BETA (4) = 4.170

X/LB	1.039
PHI	
.000	-.1480
40.000	-.1780

MACH (1) = .597 BETA (5) = 8.240

X/LB	1.039
PHI	
.000	-.1580
40.000	-.1780

MACH (2) = .898 BETA (1) = -8.130

X/LB	1.039
PHI	
.000	-.1920
40.000	-.1700

MACH (2) = .901 BETA (2) = -4.020

X/LB	1.039
PHI	
.000	-.3870
40.000	-.2200

MACH (2) = .901 BETA (3) = .080

X/LB	1.039
PHI	
.000	-.4190
40.000	-.3030

AMES 11-7ft OA12 OBA BODY FLAP (RBPF31)

SECTION ' 1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = .697 BETA (4) = 4.250

	X/LB 1.039
PHI	
.000	-.2110
40.000	-.2175

MACH (2) = .698 BETA (5) = 8.330

	X/LB 1.039
PHI	
.000	-.2050
40.000	-.2010

AMES 11-707 OA12 02A BODY FLAP (RBPF32) (01 MAY 73)

REFERENCE DATA

SREF = 2.4219 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 20.000 RUDDER = .000
ELEVON = -20.000 RUDFLR = .000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -7.980 X/LB 1.039
PHI
.000 -.1340
40.000 -.1440

MACH (1) = .597 BETA (2) = -3.950 X/LB 1.039
PHI
.000 -.1320
40.000 -.1540

MACH (1) = .599 BETA (3) = .070 X/LB 1.039
PHI
.000 -.1250
40.000 -.1630

MACH (1) = .598 BETA (4) = 4.190 X/LB 1.039
PHI
.000 -.1240
40.000 -.1710

MACH (1) = .600 BETA (5) = 8.290 X/LB 1.039
PHI
.000 -.1360
40.000 -.1780

MACH (2) = .902 BETA (1) = -8.070 X/LB 1.039
PHI
.000 -.2410
40.000 -.2150

MACH (2) = .898 BETA (2) = -4.000 X/LB 1.039
PHI
.000 -.3690
40.000 -.2930

MACH (2) = .905 BETA (3) = .070 X/LB 1.039
PHI
.000 -.3910
40.000 -.3400

AMES 11-7x7 OA12 02A BODY FLAP (RBFF32)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = .897 BETA (4) = 4.220

X/LB	1.039
PHI	
.000	-.3740
40.000	-.3430

MACH (2) = .901 BETA (5) = 8.360

X/LB	1.039
PHI	
.000	-.1900
40.000	-.2200

AMES 11-707 OA12 02A BODY FLAP (RBPF33) (01 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHA =	-4.000	RUDDER =	.000
ELEVON =	.000	RUDFLR =	40.000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -4.910

X/LB	1.039
PHI	
.000	-.1760
40.000	-.1740

MACH (1) = .599 BETA (2) = .080

X/LB	1.039
PHI	
.000	-.1760
40.000	-.1870

MACH (1) = .598 BETA (3) = 5.280

X/LB	1.039
PHI	
.000	-.1810
40.000	-.1850

MACH (2) = .899 BETA (1) = -4.990

X/LB	1.039
PHI	
.000	-.1610
40.000	-.1770

MACH (2) = .899 BETA (2) = .080

X/LB	1.039
PHI	
.000	-.1550
40.000	-.1860

MACH (2) = .900 BETA (3) = 5.350

X/LB	1.039
PHI	
.000	-.1630
40.000	-.1910

AMES 11-7U7 OA12 02A BODY FLAP (RBFF34) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000
ELEVON = .000 RUDFLR = 40.000

SECTION (1)BODY FLAP

DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -7.990

X/LB	1.039
PHI	
.000	-.1890
40.000	-.1750

MACH (1) = .599 BETA (2) = -3.950

X/LB	1.039
PHI	
.000	-.1760
40.000	-.1730

MACH (1) = .599 BETA (3) = .090

X/LB	1.039
PHI	
.000	-.1770
40.000	-.1820

MACH (1) = .599 BETA (4) = 4.200

X/LB	1.039
PHI	
.000	-.1780
40.000	-.1880

MACH (1) = .599 BETA (5) = 8.310

X/LB	1.039
PHI	
.000	-.1850
40.000	-.1950

MACH (2) = .896 BETA (1) = -8.100

X/LB	1.039
PHI	
.000	-.1660
40.000	-.1790

MACH (2) = .897 BETA (2) = -4.010

X/LB	1.039
PHI	
.000	-.1530
40.000	-.1650

MACH (2) = .898 BETA (3) = .080

X/LB	1.039
PHI	
.000	-.1550
40.000	-.1780

AMES 11-7U7 OA12 O2A BODY FLAP (RBPF34)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = .895 BETA (4) = 4.250

X/LB	1.039
PHI	
.000	-.1570
40.000	-.1810

MACH (2) = .901 BETA (5) = 8.430

X/LB	1.039
PHI	
.000	-.1680
40.000	-.2150

AMES 11-7U7 OA12 O2A BODY FLAP (RBFF35) (01 MAY 73)

REFERENCE DATA

SREF = 2.4[illegible] SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0500 SCALE

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000
ELEVON = .000 RUDFLR = 40.000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -8.040
X/LB 1.039
PHI
.000 -.1720
40.000 -.1640

MACH (1) = .599 BETA (2) = -3.980
X/LB 1.039
PHI
.000 -.1710
40.000 -.1670

MACH (1) = .599 BETA (3) = .080
X/LB 1.039
PHI
.000 -.1640
40.000 -.1720

MACH (1) = .599 BETA (4) = 4.170
X/LB 1.039
PHI
.000 -.1680
40.000 -.1610

MACH (1) = .600 BETA (5) = 8.260
X/LB 1.039
PHI
.000 -.1760
40.000 -.1090

MACH (2) = .903 BETA (1) = -8.160
X/LB 1.039
PHI
.000 -.1550
40.000 -.1700

MACH (2) = .902 BETA (2) = -4.040
X/LB 1.039
PHI
.000 -.1460
40.000 -.1640

MACH (2) = .904 BETA (3) = .080
X/LB 1.039
PHI
.000 -.1450
40.000 -.1760

AMES 11-7X7 OA12 O2A BODY FLAP (REPF35)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = .902 BETA (4) = 4.220

X/LB	1.039
PHI	
.000	-.1535
45.000	-.1850

MACH (2) = .898 BETA (5) = 8.370

X/LB	1.039
PHI	
.000	-.1630
45.000	-.2150

AMES 11-7X7 OA12 02A BODY FLAP (PBPF36) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.53[illegible] INCHES
LREF = 39.84[illegible] INCHES YMRP = .[illegible] INCHES
BREF = 39.84[illegible] INCHES ZMRP = .[illegible] INCHES
SCALE = .03[illegible] SCALE

PARAMETRIC DATA

ALPHA = 1[illegible] RUDDER = .[illegible]
ELEVON = .[illegible] RUDFLR = 4[illegible]

SECTION / 1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -8.07[illegible] X/LB 1.039
PHI
.[illegible] -.153[illegible]
4[illegible] -.144[illegible]

MACH (1) = .598 BETA (2) = -3.99[illegible] X/LB 1.039
PHI
.[illegible] -.156[illegible]
4[illegible] -.147[illegible]

MACH (1) = .599 BETA (3) = .0[illegible] X/LB 1.039
PHI
.[illegible] -.146[illegible]
4[illegible] -.157[illegible]

MACH (1) = .6[illegible] BETA (4) = 4.16[illegible] X/LB 1.039
PHI
.[illegible] -.153[illegible]
4[illegible] -.166[illegible]

MACH (1) = .599 BETA (5) = 8.23[illegible] X/LB 1.039
PHI
.[illegible] -.156[illegible]
4[illegible] -.167[illegible]

MACH (2) = .9[illegible] BETA (1) = -8.17[illegible] X/LB 1.039
PHI
.[illegible] -.166[illegible]
4[illegible] -.164[illegible]

MACH (2) = .9[illegible] BETA (2) = -4.0[illegible] X/LB 1.039
PHI
.[illegible] -.168[illegible]
4[illegible] -.17[illegible]

MACH (2) = .899 BETA (3) = .0[illegible] X/LB 1.039
PHI
.[illegible] -.168[illegible]
4[illegible] -.191[illegible]

AMES 11-7U7 OA12 O2A BODY FLAP (RBPF36)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = .897 BETA (4) = 4.2[illegible] X/LB 1.039

PHI	
.[illegible]	-.166[illegible]
4[illegible].[illegible]	-.2[illegible]3[illegible]

MACH (2) = .9[illegible]2 BETA (5) = 8.3[illegible] X/LB 1.039

PHI	
.[illegible]	-.165[illegible]
4[illegible].[illegible]	-.22[illegible]

AMES 11-707 OA12 02A BODY FLAP (RBPF37) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 20.5360 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0310 SCALE

PARAMETRIC DATA

ALPHA = 15.000 RUDDER = .000
ELEVON = .000 RUDFLR = 40.000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .996 BETA (1) = -8.050
X/LB 1.039
PHI
.000 -.1470
40.000 -.1230

MACH (1) = .998 BETA (2) = -3.990
X/LB 1.039
PHI
.000 -.1380
40.000 -.1310

MACH (1) = .998 BETA (3) = .080
X/LB 1.039
PHI
.000 -.1420
40.000 -.1510

MACH (1) = .996 BETA (4) = 4.160
X/LB 1.039
PHI
.000 -.1310
40.000 -.1430

MACH (1) = .997 BETA (5) = 8.250
X/LB 1.039
PHI
.000 -.1360
40.000 -.1540

MACH (2) = .899 BETA (1) = -8.150
X/LB 1.039
PHI
.000 -.1600
40.000 -.1590

MACH (2) = .897 BETA (2) = -4.030
X/LB 1.039
PHI
.000 -.1630
40.000 -.1840

MACH (2) = .900 BETA (3) = .070
X/LB 1.039
PHI
.000 -.1750
40.000 -.2130

DATE :8 SEP 73 TABULATED PRESSURE DATA - OA12A (PBPF37)

AMES 11-7x7 OA12 02A BODY FLAP

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = .9x2 BETA (4) = 4.2xx

X/LB	1.039
PHI	
.xxx	-.173x
4x.xxx	-.217x

MACH (2) = .9x2 BETA (5) = 8.33x

X/LB	1.039
PHI	
.xxx	-.162x
4x.xxx	-.214x

AMES 11-FT CA12 02A BODY FLAP (RBPF30) (01 MAY 73)

REFERENCE DATA

SREF	=	2.4210 SQ.FT.	XMRP	=	28.5300 INCHES
LREF	=	30.8490 INCHES	YMRP	=	.0000 INCHES
BREF	=	39.8490 INCHES	ZMRP	=	.0000 INCHES
SCALE	=	.0300 SCALE			

PARAMETRIC DATA

ALPHA	=	20.000	RUDDER = .000
ELEVON	=	.000	RUDFLR = 40.000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -8.000

X/LB	1.039
PHI	
.000	-.1260
40.000	-.1230

MACH (1) = .598 BETA (2) = -3.960

X/LB	1.039
PHI	
.000	-.1280
40.000	-.1290

MACH (1) = .597 BETA (3) = .080

X/LB	1.039
PHI	
.000	-.1210
40.000	-.1550

MACH (1) = .597 BETA (4) = 4.190

X/LB	1.039
PHI	
.000	-.1280
40.000	-.1470

MACH (1) = .598 BETA (5) = 8.300

X/LB	1.039
PHI	
.000	-.1240
40.000	-.1260

MACH (2) = .901 BETA (1) = -8.080

X/LB	1.039
PHI	
.000	-.1630
40.000	-.2300

MACH (2) = .899 BETA (2) = -3.990

X/LB	1.039
PHI	
.000	-.1740
40.000	-.2500

MACH (2) = .901 BETA (3) = .080

X/LB	1.039
PHI	
.000	-.1750
40.000	-.2690

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPF38)

AMES 11-7U7 OA12 OEA BODY FLAP

SECTION ' 1)BODY FLAP DEPENDENT VARIABLE CP

MACH ' 2) = .9[illegible] BETA (4) = 4.22[illegible]

X/LB	1.039
PHI	
.[illegible]	-.178[illegible]
4[illegible].[illegible]	-.25[illegible]

MACH (2) = .899 BETA (5) = 8.36[illegible]

X/LB	1.039
PHI	
.[illegible]	-.166[illegible]
4[illegible].[illegible]	-.223[illegible]

AMES 11-7X7 OA12 02A BODY FLAP (RBPF39) (01 MAY 73)

REFERENCE DATA

SREF = 2.421% SQ.FT. XMRP = 28.53X0 INCHES
LREF = 39.849% INCHES YMRP = .0000 INCHES
BREF = 39.849% INCHES ZMRP = .0000 INCHES
SCALE = .03X0 SCALE

PARAMETRIC DATA

BETA = .000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = 1.099 ALPHA (1) = -4.550

X/LB	1.039
PHI	
.000	-.2340
40.000	-.2140

MACH (1) = 1.100 ALPHA (2) = -3.520

X/LB	1.039
PHI	
.000	-.2120
40.000	-.2050

MACH (1) = 1.100 ALPHA (3) = -1.490

X/LB	1.039
PHI	
.000	-.2040
40.000	-.1980

MACH (1) = 1.098 ALPHA (4) = .540

X/LB	1.039
PHI	
.000	-.1950
40.000	-.1910

MACH (1) = 1.100 ALPHA (5) = 2.510

X/LB	1.039
PHI	
.000	-.1710
40.000	-.1800

MACH (1) = 1.099 ALPHA (6) = 4.050

X/LB	1.039
PHI	
.000	-.1540
40.000	-.1700

MACH (1) = 1.100 ALPHA (7) = 6.630

X/LB	1.039
PHI	
.000	-.1200
40.000	-.1580

MACH (1) = 1.100 ALPHA (8) = 8.590

X/LB	1.039
PHI	
.000	-.0920
40.000	-.1540

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPF39)

AMES 11-7D7 OA12 02A BODY FLAP

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = 1.099 ALPHA (9) = 9.970

X/LB	1.039
PHI	
.000	-.0840
40.000	-.1500

MACH (1) = 1.101 ALPHA (10) = 14.970

X/LB	1.039
PHI	
.000	-.0430
40.000	-.1430

MACH (2) = 1.247 ALPHA (1) = -4.440

X/LB	1.039
PHI	
.000	-.2210
40.000	-.2010

MACH (2) = 1.248 ALPHA (2) = -3.470

X/LB	1.039
PHI	
.000	-.1990
40.000	-.1890

MACH (2) = 1.247 ALPHA (3) = -1.470

X/LB	1.039
PHI	
.000	-.1640
40.000	-.1720

MACH (2) = 1.248 ALPHA (4) = .520

X/LB	1.039
PHI	
.000	-.1330
40.000	-.1540

MACH (2) = 1.250 ALPHA (5) = 2.580

X/LB	1.039
PHI	
.000	-.1010
40.000	-.1310

MACH (2) = 1.249 ALPHA (6) = 4.570

X/LB	1.039
PHI	
.000	-.0770
40.000	-.1180

MACH (2) = 1.248 ALPHA (7) = 6.670

X/LB	1.039
PHI	
.000	-.0520
40.000	-.1040

AMES 11-7X7 OA12 O2A BODY FLAP (PBFF39)

SECTION (1)BODY FLAP

DEPENDENT VARIABLE CP

MACH (2) = 1.249 ALPHA (8) = 8.660

X/LB	1.039
PHI	
.000	-.0280
40.000	-.0900

MACH (2) = 1.246 ALPHA (9) = 10.030

X/LB	1.039
PHI	
.000	-.0140
40.000	-.0850

MACH (2) = 1.244 ALPHA (10) = 14.980

X/LB	1.039
PHI	
.000	.0530
40.000	-.0630

MACH (3) = 1.398 ALPHA (1) = -4.420

X/LB	1.039
PHI	
.000	-.1740
40.000	-.1720

MACH (3) = 1.395 ALPHA (2) = -3.420

X/LB	1.039
PHI	
.000	-.1580
40.000	-.1590

MACH (3) = 1.398 ALPHA (3) = -1.430

X/LB	1.039
PHI	
.000	-.1240
40.000	-.1410

MACH (3) = 1.397 ALPHA (4) = .520

X/LB	1.039
PHI	
.000	-.0900
40.000	-.1220

MACH (3) = 1.396 ALPHA (5) = 2.600

X/LB	1.039
PHI	
.000	-.0550
40.000	-.0990

MACH (3) = 1.397 ALPHA (6) = 4.570

X/LB	1.039
PHI	
.000	-.0250
40.000	-.0790

AMES 11-7U7 OA12 O2A BODY FLAP (FBPF39)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (3) = 1.399 ALPHA (7) = 6.44U

PHI	X/LB 1.039
.UUU	.U12U
4U.UUU	-.U51U

MACH (3) = 1.398 ALPHA (8) = 8.71U

PHI	X/LB 1.039
.UUU	.U48U
4U.UUU	-.U36U

MACH (3) = 1.397 ALPHA (9) = 1U.11U

PHI	X/LB 1.039
.UUU	.U69U
4U.UUU	-.U25U

MACH (3) = 1.394 ALPHA (1U) = 15.U3U

PHI	X/LB 1.039
.UUU	.141U
4U.UUU	.U15U

AMES 11-7U7 OA12 O2A BODY FLAP (RBPF4U) (01 MAY 73)

REFERENCE DATA

SREF =	2.4210	SQ.FT.	XMRP =	28.5300	INCHES
LREF =	39.8490	INCHES	YMRP =	.0000	INCHES
BREF =	39.8490	INCHES	ZMRP =	.0000	INCHES
SCALE =	.0300	SCALE			

PARAMETRIC DATA

ALPHA =	.500	RUDDER =	.000
ELEVON =	.000	RUDFLR =	.000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = 1.099 BETA (1) = -8.080

X/LB	1.039
PHI	
.000	-.1280
40.000	-.1270

MACH (1) = 1.101 BETA (2) = -4.000

X/LB	1.039
PHI	
.000	-.1670
40.000	-.1490

MACH (1) = 1.100 BETA (3) = -1.960

X/LB	1.039
PHI	
.000	-.1810
40.000	-.1610

MACH (1) = 1.099 BETA (4) = .080

X/LB	1.039
PHI	
.000	-.1900
40.000	-.1940

MACH (1) = 1.099 BETA (5) = 2.150

X/LB	1.039
PHI	
.000	-.1790
40.000	-.2150

MACH (1) = 1.100 BETA (6) = 4.230

X/LB	1.039
PHI	
.000	-.1750
40.000	-.2370

MACH (1) = 1.099 BETA (7) = 8.390

X/LB	1.039
PHI	
.000	-.1340
40.000	-.2480

MACH (2) = 1.250 BETA (1) = -8.040

X/LB	1.039
PHI	
.000	-.1060
40.000	-.0930

AMES 11-7U7 OA12 O2A BODY FLAP (RBPF4U)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = 1.247 BETA (2) = -3.970

X/LB	1.039
PHI	
.000	-.1260
40.000	-.1190

MACH (2) = 1.247 BETA (3) = -1.940

X/LB	1.039
PHI	
.000	-.1310
40.000	-.1310

MACH (2) = 1.246 BETA (4) = .080

X/LB	1.039
PHI	
.000	-.1350
40.000	-.1530

MACH (2) = 1.245 BETA (5) = 2.140

X/LB	1.039
PHI	
.000	-.1380
40.000	-.1650

MACH (2) = 1.245 BETA (6) = 4.210

X/LB	1.039
PHI	
.000	-.1370
40.000	-.1760

MACH (2) = 1.247 BETA (7) = 8.340

X/LB	1.039
PHI	
.000	-.1140
40.000	-.1920

MACH (3) = 1.396 BETA (1) = -8.040

X/LB	1.039
PHI	
.000	-.0860
40.000	-.0870

MACH (3) = 1.399 BETA (2) = -3.970

X/LB	1.039
PHI	
.000	-.0920
40.000	-.0930

MACH (3) = 1.397 BETA (3) = .080

X/LB	1.039
PHI	
.000	-.0950
40.000	-.1230

DATE 18 SEP 75 TABULATED PRESSURE DATA - CASE4

AMES 11-FT P CASE DEF DOC FLAP

SECTION 1 1/800Y FLAP DEPENDENT VARIABLE CP

MACH (3) = 1.394 BETA (4) = 4.21U

X/CB	1.039
PHI	
.000	-.1046
40.000	-.1350

MACH (3) = 1.392 BETA (5) = 8.36U

X/CB	1.039
PHI	
.000	-.1426
40.000	-.1476

AMES 11-7U7 OA12 O2A BODY FLAP (RBPF41) (01 MAY 73)

REFERENCE DATA

SREF =	2.421U	SQ.FT.	XMRP =	28.53U0	INCHES
LREF =	39.849U	INCHES	YMRP =	.UUU0	INCHES
BREF =	39.849U	INCHES	ZMRP =	.UUU0	INCHES
SCALE =	.U3U0	SCALE			

PARAMETRIC DATA

ALPHA =	-4.UU0	RUDDER =	-1U.UU0
ELEVON =	.UU0	RUDFLR =	.UU0

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .6U0 BETA (1) = -4.91U

X/LB	1.039
PHI	
.UU0	-.159U
4U.UU0	-.152U

MACH (1) = .598 BETA (2) = .09U

X/LB	1.039
PHI	
.UU0	-.154U
4U.UU0	-.155U

MACH (1) = .6U0 BETA (3) = 5.28U

X/LB	1.039
PHI	
.UU0	-.164U
4U.UU0	-.165U

MACH (2) = .9U0 BETA (1) = -4.99U

X/LB	1.039
PHI	
.UU0	-.145U
4U.UU0	-.153U

MACH (2) = .9U0 BETA (2) = .09U

X/LB	1.039
PHI	
.UU0	-.132U
4U.UU0	-.149U

MACH (2) = .901 BETA (3) = 5.36U

X/LB	1.039
PHI	
.UU0	-.142U
4U.UU0	-.16U0

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (BBFF42) (01 MAY 73)

AMES 11-7X7 OA12 02A BODY FLAP

PARAMETRIC DATA

ALPHA = -4.1 RUDDER = -20.
ELEVON = .0 RUDFLP = .0

REFERENCE DATA

SREF = 2.421 SQ.FT. XMRP = 28.53 INCHES
LREF = 39.849 INCHES YMRP = .000 INCHES
BREF = 39.849 INCHES ZMRP = .000 INCHES
SCALE = .050 SCALE

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .996 BETA (1) = -4.90 X/LB 1.039
PHI
.000 -.1660
45.000 -.1610

MACH (1) = .996 BETA (2) = .10 X/LB 1.039
PHI
.000 -.1660
45.000 -.1610

MACH (1) = .998 BETA (3) = 5.29 X/LB 1.039
PHI
.000 -.1680
45.000 -.1750

MACH (2) = .994 BETA (1) = -4.98 X/LB 1.039
PHI
.000 -.1450
45.000 -.1470

MACH (2) = .98 BETA (2) = .10 X/LB 1.039
PHI
.000 -.1390
45.000 -.1570

MACH (2) = .981 BETA (3) = 5.36 X/LB 1.039
PHI
.000 -.1510
45.000 -.1700

AMES 11-7U7 OA12 O2A BODY FLAP (R8PF43) (01 MAY 73)

REFERENCE DATA

SREF =	2.4210	SQ.FT.	XMRP =	28.5300	INCHES
LREF =	39.8490	INCHES	YMRP =	.0000	INCHES
BREF =	39.8490	INCHES	ZMRP =	.0000	INCHES
SCALE =	.0300	SCALE			

PARAMETRIC DATA

ALPHA =	-4.000	RUDDER =	.000
ELEVON =	10.000	RUDFLR =	.000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -4.910

X/LB	1.039
PHI	
.000	-.1530
40.000	-.1490

MACH (1) = .599 BETA (2) = .080

X/LB	1.039
PHI	
.000	-.1500
40.000	-.1490

MACH (1) = .597 BETA (3) = 5.270

X/LB	1.039
PHI	
.000	-.1470
40.000	-.1360

MACH (2) = .897 BETA (1) = -4.980

X/LB	1.039
PHI	
.000	-.1610
40.000	-.1510

MACH (2) = .896 BETA (2) = .080

X/LB	1.039
PHI	
.000	-.1200
40.000	-.1300

MACH (2) = .903 BETA (3) = 5.340

X/LB	1.039
PHI	
.000	-.1570
40.000	-.1570

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPF44) (01 MAY 73)

AMES 11-7X7 OA12 02A BODY FLAP

PARAMETRIC DATA

ALPHA = -4.000 RUDDER = .000
ELEVON = -10.000 RUDFLP = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.530 INCHES
LREF = 39.[illegible] INCHES YMRP = .000 INCHES
BREF = 39.849 INCHES ZMRP = .000 INCHES
SCALE = .030 SCALE

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .597 BETA (1) = -4.910

X/LB	1.039
PHI	
.000	-.1630
40.000	-.1590

MACH (1) = .597 BETA (2) = .080

X/LB	1.039
PHI	
.000	-.1550
40.000	-.1530

MACH (1) = .597 BETA (3) = 5.270

X/LB	1.039
PHI	
.000	-.1510
40.000	-.1460

MACH (2) = .903 BETA (1) = -4.980

X/LB	1.039
PHI	
.000	-.1350
40.000	-.1500

MACH (2) = .902 BETA (2) = .080

X/LB	1.039
PHI	
.000	-.1260
40.000	-.1500

MACH (2) = .904 BETA (3) = 5.340

X/LB	1.039
PHI	
.000	-.1320
40.000	-.1470

AMES 11-7X7 OA12 OBA BODY FLAP (RBPF49) (01 MAY 73)

REFERENCE DATA

SREF = 2.421 SQ.FT. XMRP = 29.539 INCHES
LREF = 39.849 INCHES YMRP = .000 INCHES
BREF = 39.849 INCHES ZMRP = .000 INCHES
SCALE = .030 SCALE

PARAMETRIC DATA

ALPHA = -4.000 RUDDER = .000
ELEVON = .000 PUDFLR = .000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .601 BETA (1) = -4.919 X/LB 1.039
PHI
.000 -.1990
40.000 -.1550

MACH (1) = .897 BETA (2) = .090 X/LB 1.039
PHI
.000 -.1480
40.000 -.1470

MACH (1) = .898 BETA (3) = 5.280 X/LB 1.039
PHI
.000 -.1530
40.000 -.1560

MACH (2) = .901 BETA (1) = -5.000 X/LB 1.039
PHI
.000 -.1390
40.000 -.1550

MACH (2) = .902 BETA (2) = .090 X/LB 1.039
PHI
.000 -.1330
40.000 -.1560

MACH (2) = .900 BETA (3) = 5.390 X/LB 1.039
PHI
.000 -.1400
40.000 -.1550

AMES 11-7X7 OA12 02A BODY FLAP (RBFF46) (01 MAY 73)

REFERENCE DATA

SREF	=	2.421[illegible]	SQ.FT.	XMRP	= 28.53[illegible] INCHES
LREF	=	39.849[illegible]	INCHES	YMRP	= .[illegible] INCHES
BREF	=	39.849[illegible]	INCHES	ZMRP	= .[illegible] INCHES
SCALE	=	.03[illegible]	SCALE		

PARAMETRIC DATA

BETA	=	.[illegible]	RUDDER	=	.[illegible]
ELEVON	=	.[illegible]	RUDFLP	=	.[illegible]

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .8[illegible] ALPHA (1) =-15.83[illegible]

X/LB	1.039
PHI	
.[illegible]	-.152[illegible]
40.[illegible]	-.136[illegible]

MACH (1) = .999 ALPHA (2) =-10.49[illegible]

X/LB	1.039
PHI	
.[illegible]	-.152[illegible]
40.[illegible]	-.197[illegible]

MACH (1) = .999 ALPHA (3) = -5.25[illegible]

X/LB	1.039
PHI	
.[illegible]	-.148[illegible]
40.[illegible]	-.164[illegible]

MACH (1) = .999 ALPHA (4) = .0[illegible]

X/LB	1.039
PHI	
.[illegible]	-.153[illegible]
40.[illegible]	-.151[illegible]

MACH (2) = .900 ALPHA (1) =-16.39[illegible]

X/LB	1.039
PHI	
.[illegible]	-.131[illegible]
40.[illegible]	-.207[illegible]

MACH (2) = .901 ALPHA (2) =-10.84[illegible]

X/LB	1.039
PHI	
.[illegible]	-.133[illegible]
40.[illegible]	-.206[illegible]

MACH (2) = .900 ALPHA (3) = -5.38[illegible]

X/LB	1.039
PHI	
.[illegible]	-.130[illegible]
40.[illegible]	-.164[illegible]

MACH (2) = .902 ALPHA (4) = .08[illegible]

X/LB	1.039
PHI	
.[illegible]	-.134[illegible]
40.[illegible]	-.148[illegible]

AMES 11-7ft OA12 OBA BODY FLAP (RBFF47) (01 MAY 73)

REFERENCE DATA

SREF = 2.421 SQ.FT. XMRP = 28.534 INCHES
LREF = 39.849 INCHES YMRP = .000 INCHES
BREF = 39.849 INCHES ZMRP = .000 INCHES
SCALE = .030 SCALE

PARAMETRIC DATA

ALPHA = -5.000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) =-10.300 X/LB 1.039
PHI
.000 -.1750
40.000 -.1700

MACH (1) = .597 BETA (2) = -5.190 X/LB 1.039
PHI
.000 -.1510
40.000 -.1580

MACH (1) = .597 BETA (3) = 5.000 X/LB 1.039
PHI
.000 -.1520
40.000 -.1620

MACH (1) = .599 BETA (4) = 10.080 X/LB 1.039
PHI
.000 -.1720
40.000 -.1670

MACH (2) = .898 BETA (1) =-10.440 X/LB 1.039
PHI
.000 -.1670
40.000 -.1840

MACH (2) = .904 BETA (2) = -5.270 X/LB 1.039
PHI
.000 -.1370
40.000 -.1560

MACH (2) = .902 BETA (3) = 5.070 X/LB 1.039
PHI
.000 -.1360
40.000 -.1630

MACH (2) = .898 BETA (4) = 10.220 X/LB 1.039
PHI
.000 -.1750
40.000 -.1890

AMES 11-707 OA12 OBA BODY FLAP (RBPF48) (01 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0350 SCALE				

PARAMETRIC DATA

ALPHA =	-10.000	RUDDER =	.000
ELEVON =	.000	RUDFLR =	.000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) =-10.280

X/LB	1.039
PHI	
.000	-.2040
40.000	-.2070

MACH (1) = .598 BETA (2) = -5.180

X/LB	1.039
PHI	
.000	-.1520
40.000	-.1700

MACH (1) = .597 BETA (3) = 5.020

X/LB	1.039
PHI	
.000	-.1500
40.000	-.1630

MACH (1) = .599 BETA (4) = 10.120

X/LB	1.039
PHI	
.000	-.2090
40.000	-.1680

MACH (2) = .901 BETA (1) =-10.460

X/LB	1.039
PHI	
.000	-.2230
40.000	-.2510

MACH (2) = .898 BETA (2) = -5.270

X/LB	1.039
PHI	
.000	-.1490
40.000	-.1950

MACH (2) = .901 BETA (3) = 5.110

X/LB	1.039
PHI	
.000	-.1550
40.000	-.1570

MACH (2) = .900 BETA (4) = 10.300

X/LB	1.039
PHI	
.000	-.2250
40.000	-.1910

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AMES 11-7U7 OA12 O2A OMS POD OUTSIDE (RBFM01) (01 MAY 73)

REFERENCE DATA

PARAMETRIC DATA

SREF =	2.421U SQ.FT.	XMRP =	28.53U0 INCHES	BETA =	.UUU RUDDER = .UUU
LREF =	39.849U INCHES	YMRP =	.UUUU INCHES	ELEVON =	.UUU RUDFLR = .UUU
BREF =	39.849U INCHES	ZMRP =	.UUUU INCHES		
SCALE =	.U3UU SCALE				

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .6UU ALPHA (1) = -4.41U

X/LB	1.UU1
PHI	
11U.UUU	-.219U
12U.UUU	-.177U

MACH (1) = .599 ALPHA (2) = .U3U

X/LB	1.UU1
PHI	
11U.UUU	-.2U5U
12U.UUU	-.158U

MACH (1) = .6UU ALPHA (3) = 5.U3U

X/LB	1.UU1
PHI	
11U.UUU	-.192U
12U.UUU	-.157U

MACH (1) = .6UU ALPHA (4) = 10.U4U

X/LB	1.UU1
PHI	
11U.UUU	-.196U
12U.UUU	-.156U

MACH (1) = .598 ALPHA (5) = 15.U2U

X/LB	1.UU1
PHI	
11U.UUU	-.26U
12U.UUU	-.2U9U

MACH (1) = .599 ALPHA (6) = 20.UUU

X/LB	1.UU1
PHI	
11U.UUU	- 334U
12U.UUU	-.23U

MACH (1) = .597 ALPHA (7) = 22.58U

X/LB	1.UU1
PHI	
11U.UUU	-.4U1U
12U.UUU	-.281U

MACH (2) = .9U5 ALPHA (1) = -4.56U

X/LB	1.UU1
PHI	
11U.UUU	-.235U
12U.UUU	-.198U

AMES 11-7U7 OA12 O2A OMS POD OUTSIDE (RBPMU1)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = .9U1 ALPHA (2) = -.01U

X/LB	1.UU1
PHI	
11U.UUU	-.213U
12U.UUU	-.168U

MACH (2) = .9U4 ALPHA (3) = 4.98U

X/LB	1.UU1
PHI	
11U.UUU	-.197U
12U.UUU	-.158U

MACH (2) = .9U6 ALPHA (4) = 9.99U

X/LB	1.UU1
PHI	
11U.UUU	-.224U
12U.UUU	-.176U

MACH (2) = .9U1 ALPHA (5) = 14.99U

X/LB	1.UU1
PHI	
11U.UUU	-.246U
12U.UUU	-.149U

MACH (2) = .9U0 ALPHA (6) = 20.02U

X/LB	1.UU1
PHI	
11U.UUU	-.439U
12U.UUU	-.363U

MACH (2) = .9U2 ALPHA (7) = 23.04U

X/LB	1.UU1
PHI	
11U.UUU	-.582U
12U.UUU	-.541U

AMES 11-7ft OA12 02A OMS POD OUTSIDE (RBFM02) (01 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300	INCHES	
LREF =	39.8490 INCHES	YMRP =	.0000	INCHES	
BREF =	39.8490 INCHES	ZMRP =	.0000	INCHES	
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHA =	.000	RUDDER =	.000
ELEVON =	.000	RUDFLR =	.000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) =-10.010

X/LB	1.001
PHI	
110.000	-.1640
120.000	-.1080

MACH (1) = .598 BETA (2) = -4.960

X/LB	1.001
PHI	
110.000	-.1780
120.000	-.1380

MACH (1) = .598 BETA (3) = 5.230

X/LB	1.001
PHI	
110.000	-.2180
120.000	-.1950

MACH (1) = .599 BETA (4) = 10.370

X/LB	1.001
PHI	
110.000	-.2380
120.000	-.2370

MACH (2) = .904 BETA (1) =-10.150

X/LB	1.001
PHI	
110.000	-.1930
120.000	-.1210

MACH (2) = .901 BETA (2) = -5.040

X/LB	1.001
PHI	
110.000	-.2020
120.000	-.1480

MACH (2) = .903 BETA (3) = 5.290

X/LB	1.001
PHI	
110.000	-.2220
120.000	-.1860

MACH (2) = .905 BETA (4) = 10.500

X/LB	1.001
PHI	
110.000	-.2260
120.000	-.2180

AMES 11-7X7 OA12 OEA OMS POD OUTSIDE (RBPM03) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.0490 INCHES YMRP = .0000 INCHES
BREF = 39.6190 INCHES ZMRP = .0000 INCHES
SCALE = .0304 SCALE

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .596 BETA (1) =-10.080 X/LB 1.001
PHI
110.000 -.1750
120.000 -.1150

MACH (1) = .599 BETA (2) = -4.990 X/LB 1.001
PHI
110.000 -.1720
120.000 -.1340

MACH (1) = .598 BETA (3) = 5.190 X/LB 1.001
PHI
110.000 -.2200
120.000 -.1880

MACH (1) = .598 BETA (4) = 10.300 X/LB 1.001
PHI
110.000 -.2420
120.000 -.2260

MACH (2) = .904 BETA (1) =-10.210 X/LB 1.001
PHI
110.000 -.1800
120.000 -.1150

MACH (2) = .900 BETA (2) = -5.070 X/LB 1.001
PHI
110.000 -.1710
120.000 -.1320

MACH (2) = .901 BETA (3) = 5.250 X/LB 1.001
PHI
110.000 -.2260
120.000 -.1820

MACH (2) = .904 BETA (4) = 10.430 X/LB 1.001
PHI
110.000 -.2390
120.000 -.1980

AMES 11-7D7 OA12 O2A OMS POD OUTSIDE (RBPMU4) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0350 SCALE

PARAMETRIC DATA

ALPHA = 10.000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) =-10.110

X/LB	1.001
PHI	
110.000	-.1680
120.000	-.1240

MACH (1) = .598 BETA (2) = -5.020

X/LB	1.001
PHI	
110.000	-.1760
120.000	-.1410

MACH (1) = .598 BETA (3) = 5.170

X/LB	1.001
PHI	
110.000	-.2240
120.000	-.1910

MACH (1) = .597 BETA (4) = 10.270

X/LB	1.001
PHI	
110.000	-.2640
120.000	-.2260

MACH (2) = .902 BETA (1) =-10.230

X/LB	1.001
PHI	
110.000	-.1930
120.000	-.1290

MACH (2) = .900 BETA (2) = -5.070

X/LB	1.001
PHI	
110.000	-.2060
120.000	-.1550

MACH (2) = .902 BETA (3) = 5.230

X/LB	1.001
PHI	
110.000	-.2420
120.000	-.1940

MACH (2) = .907 BETA (4) = 10.390

X/LB	1.001
PHI	
110.000	-.2440
120.000	-.1920

AMES 11-707 OA12 O2A OMS POD OUTSIDE (RBPM05) (01 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.4490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHA =	15.000	RUDDER =	.000
ELEVON =	.000	RUDFLR =	.000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) =-10.090

X/LB	1.001
PHI	
110.000	-.2060
120.000	-.1380

MACH (1) = .598 BETA (2) = -5.000

X/LB	1.001
PHI	
110.000	-.2390
120.000	-.1610

MACH (1) = .596 BETA (3) = 5.180

X/LB	1.001
PHI	
110.000	-.2900
120.000	-.2280

MACH (1) = .600 BETA (4) = 10.290

X/LB	1.001
PHI	
110.000	-.3130
120.000	-.2700

MACH (2) = .904 BETA (1) =-10.200

X/LB	1.001
PHI	
110.000	-.2710
120.000	-.1730

MACH (2) = .902 BETA (2) = -5.050

X/LB	1.001
PHI	
110.000	-.2430
120.000	-.1450

MACH (2) = .904 BETA (3) = 5.220

X/LB	1.001
PHI	
110.000	-.2380
120.000	-.1910

MACH (2) = .904 BETA (4) = 10.390

X/LB	1.001
PHI	
110.000	-.2470
120.000	-.2030

AMES 11-7U7 OA12 O2A OMS POD OUTSIDE (RBPM06) (01 MAY 73)

REFERENCE DATA

SREF =	2.421U	SQ.FT.	XMRP =	28.53UU	INCHES
LREF =	39.849U	INCHES	YMRP =	.UUUU	INCHES
BREF =	39.849U	INCHES	ZMRP =	.UUUU	INCHES
SCALE =	.UUUU	SCALE			

PARAMETRIC DATA

ALPHA =	2U.UUU	RUDDER =	.UUU
ELEVON =	.UUU	RUDFLR =	.UUU

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .596 BETA (1) =-10.030

X/LB	1.001
PHI	
110.000	-.2890
120.000	-.1360

MACH (1) = .597 BETA (2) = -4.970

X/LB	1.001
PHI	
110.000	-.2920
120.000	-.1910

MACH (1) = .597 BETA (3) = 5.210

X/LB	1.001
PHI	
110.000	-.3450
120.000	-.2820

MACH (1) = .599 BETA (4) = 10.360

X/LB	1.001
PHI	
110.000	-.3640
120.000	-.3470

MACH (2) = .902 BETA (1) =-10.110

X/LB	1.001
PHI	
110.000	-.3870
120.000	-.2290

MACH (2) = .900 BETA (2) = -5.020

X/LB	1.001
PHI	
110.000	-.3730
120.000	-.3000

MACH (2) = .904 BETA (3) = 5.260

X/LB	1.001
PHI	
110.000	.30
120.000	-.4050

MACH (2) = .905 BETA (4) = 10.430

X/LB	1.001
PHI	
110.000	-.4040
120.000	-.3600

AMES 11-707 OA12 02A OMS POD OUTSIDE (RBF#07) (01 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5350 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHA =	.000	RUDDER =	-10.000
ELEVON =	.000	RUDFLR =	.000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -7.980

X/LB	1.001
PHI	
110.000	-.1730
120.000	-.1210

MACH (1) = .600 BETA (2) = -3.940

X/LB	1.001
PHI	
110.000	-.1890
120.000	-.1440

MACH (1) = .600 BETA (3) = .090

X/LB	1.001
PHI	
110.000	-.2080
120.000	-.1650

MACH (1) = .599 BETA (4) = 4.210

X/LB	1.001
PHI	
110.000	-.2240
120.000	-.1910

MACH (1) = .597 BETA (5) = 8.320

X/LB	1.001
PHI	
110.000	-.2340
120.000	-.2210

MACH (2) = .902 BETA (1) = -8.090

X/LB	1.001
PHI	
110.000	-.2050
120.000	-.1370

MACH (2) = .901 BETA (2) = -4.000

X/LB	1.001
PHI	
110.000	-.2120
120.000	-.1520

MACH (2) = .903 BETA (3) = .090

X/LB	1.001
PHI	
110.000	-.2160
120.000	-.1830

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AMES 11-7U7 OA12 O2A OMS POD OUTSIDE (RBPM07)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = .902 BETA (4) = 4.260

X/LB	1.101
PHI	
110.000	-.2320
120.000	-.1950

MACH (2) = .905 BETA (5) = 8.440

X/LB	1.001
PHI	
110.000	-.2390
120.000	-.2100

AMES 11-7ft OA12 U2A OMS POD OUTSIDE (RBPM08) (01 MAY 73)

REFERENCE DATA

SREF =	2.421[illegible]	SQ.FT.	XMRP =	28.5300	INCHES
LREF =	39.8490	INCHES	YMRP =	.0000	INCHES
BREF =	39.8490	INCHES	ZMRP =	.0000	INCHES
SCALE =	.0300	SCALE			

PARAMETRIC DATA

ALPHA =	5.000	RUDDER =	-10.000
ELEVON =	.000	RUDFLR =	.000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -6.040

X/LB	1.001
PHI	
110.000	-.1620
120.000	-.1200

MACH (1) = .599 BETA (2) = -3.970

X/LB	1.001
PHI	
110.000	-.1770
120.000	-.1400

MACH (1) = .600 BETA (3) = .090

X/LB	1.001
PHI	
110.000	-.1980
120.000	-.1590

MACH (1) = .601 BETA (4) = 4.180

X/LB	1.001
PHI	
110.000	-.2230
120.000	-.1900

MACH (1) = .601 BETA (5) = 8.260

X/LB	1.001
PHI	
110.000	-.2400
120.000	-.2110

MACH (2) = .900 BETA (1) = -8.140

X/LB	1.001
PHI	
110.000	-.1700
120.000	-.1160

MACH (2) = .903 BETA (2) = -4.030

X/LB	1.001
PHI	
110.000	-.1810
120.000	-.1340

MACH (2) = .901 BETA (3) = .090

X/LB	1.001
PHI	
110.000	-.1900
120.000	-.1590

AMES 11-7X7 OA12 O2A OMS POD OUTSIDE (RBFM,8)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = .903 BETA (4) = 4.22[illegible]

X/LB	1.001
PHI	
110.000	-.2290
120.000	-.1820

MACH (2) = .901 BETA (5) = 8.370

X/LB	1.001
PHI	
110.000	-.2410
120.000	-.1890

AMES 11-7X7 OA12 O2A OMS POD OUTSIDE (REM 01 3 MAY 73)

REFERENCE DATA

PARAMETRIC DATA

SREF = 2.4210 SQ.FT. XMRP = 28.1300 INCHES
LREF = 39.4490 INCHES YMRP = .0000 INCHES
DREF = 39.4490 INCHES ZMRP = .1000 INCHES
SCALE = .0500 SCALE

ALPHA = [illegible] MODEL = [illegible]
ELEVON = [illegible] FLOFLP = [illegible]

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -4.060 X/LB 1.001
PHI
110.000 .1700
120.000 - 1330

MACH (1) = .601 BETA (2) = -4.080 X/LB 1.001
PHI
110.000 -.1840
120.000 -.1440

MACH (1) = .600 BETA (3) = .080 X/LB 1.001
PHI
110.000 -.2060
120.000 -.1560

MACH (1) = .599 BETA (4) = 4.170 X/LB 1.001
PHI
110.000 -.2260
120.000 - 1840

MACH (1) = .599 BETA (5) = 8.240 X/LB 1.001
PHI
110.000 - 2280
120.000 -.2080

MACH (2) = .904 BETA (1) = -8.160 X/LB 1.001
PHI
110.000 -.1960
120.000 -.1490

MACH (2) = .902 BETA (2) = -4.040 X/LB 1.001
PHI
110.000 -.2170
120.000 -.1670

MACH (2) = .899 BETA (3) = .090 X/LB 1.001
PHI
110.000 .1230
120.000 -.1810



AMES 11-7U7 OA12 O2A OMS POD OUTSIDE (RBPM09)

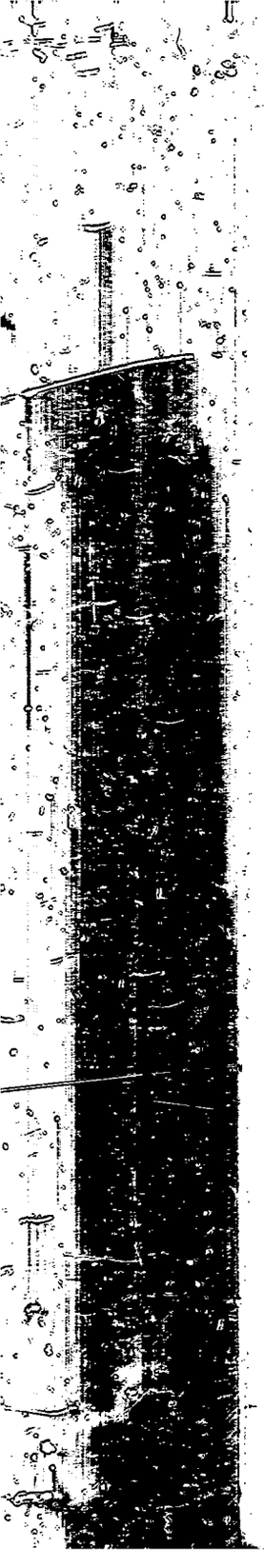
SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = .898 BETA (4) = 4.200

X/LB	1.001
PHI	
110.000	-.2570
120.000	-.1980

MACH (2) = .900 BETA (5) = 8.330

X/LB	1.001
PHI	
110.000	-.2630
120.000	-.2010



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AMES 11-7U7 OA12 O2A OMS POD OUTSIDE (RBPM1U) ( ) MAY 73)

PARAMETRIC DATA

ALPHA = [illegible] MODEL = [illegible]
ELEVON = [illegible] FLOFLO = [illegible]

REFERENCE DATA

SREF = 2.421U SQ.FT. XMRP = 28.53U INCHES
LREF = 39.849U INCHES YMRP = .UUUU INCHES
BREF = 39.849U INCHES ZMRP = .UUUU INCHES
SCALE = .U3UU SCALE

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -8.04U

X/LB	1.UU1
PHI	
11U.UUU	-.2U9U
12U.UUU	-.144U

MACH (1) = .599 BETA (2) = -3.93U

X/LB	1.UU1
PHI	
11U.UUU	-.243U
12U.UUU	-.172U

MACH (1) = .598 BETA (3) = .08U

X/LB	1.UU1
PHI	
11U.UUU	-.272U
12U.UUU	-.2U7U

MACH (1) = .598 BETA (4) = 4.17U

X/LB	1.UU1
PHI	
11U.UUU	-.287U
12U.UUU	-.225U

MACH (1) = .6U1 BETA (5) = 9.25U

X/LB	1.UU1
PHI	
11U.UUU	-.294U
12U.UUU	-.259U

MACH (2) = .9U2 BETA (1) = -8.13U

X/LB	1.UU1
PHI	
11U.UUU	-.261U
12U.UUU	-.159U

MACH (2) = .899 BETA (2) = -4.02U

X/LB	1.UU1
PHI	
11U.UUU	-.26U0
12U.UUU	-.153U

MACH (2) = .9U1 BETA (3) = .08U

X/LB	1.UU1
PHI	
11U.UUU	-.266U
12U.UUU	-.154U

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7X7 OA12 02A OMS POD OUTSIDE (RBPM10)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = .901 BETA (4) = 4.200

X/LB	1.001
PHI	
110.000	-.2570
120.000	-.2000

MACH (2) = .900 BETA (5) = 8.330

X/LB	1.001
PHI	
110.000	-.2510
120.000	-.2070

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7D7 OA12 O2A OMS POD OUTSIDE (REFM11 (11 MAY 73)

REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.9490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = [illegible] RUDDER = -10.0000
ELEVON = .000 RUDFLP = .0000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -7.990

X/LB	1.001
PHI	
110.000	-.2920
120.000	-.1600

MACH (1) = .598 BETA (2) = -3.960

X/LB	1.001
PHI	
110.000	-.3060
120.000	-.2060

MACH (1) = .598 BETA (3) = .090

X/LB	1.001
PHI	
110.000	-.3[illegible]
120.000	-.2560

MACH (1) = .598 BETA (4) = 4.190

X/LB	1.001
PHI	
110.000	-.3600
120.000	-.2850

MACH (1) = .600 BETA (5) = 8.310

X/LB	1.001
PHI	
110.000	-.3480
120.000	-.3220

MACH (2) = .899 BETA (1) = -8.060

X/LB	1.001
PHI	
110.000	-.3990
120.000	-.2650

MACH (2) = .900 BETA (2) = -3.980

X/LB	1.001
PHI	
110.000	-.3990
120.000	-.3160

MACH (2) = .900 BETA (3) = .090

X/LB	1.001
PHI	
110.000	-.4330
120.000	-.3645

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 OBA OMS POD OUTSIDE (RBPM11)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = .9[illegible] BETA (4) = 4.230

X/LB	1.001
PHI	
110.000	-.4100
120.000	-.4030

MACH (2) = .901 BETA (5) = 8.360

X/LB	1.001
PHI	
110.000	-.4310
120.000	-.4010

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (BPN12) 11 MAY 73

AMES 11-7U7 OA12 32A OMS POD OUTSIDE

REFERENCE DATA

SREF = 2.421U SQ.FT. XMRP = 28.53UU INCHES
LREF = 39.849U INCHES YMRP = .UUUU INCHES
BREF = 39.849U INCHES ZMRP = .UUUU INCHES
SCALE = .U3UU SCALE

PARAMETRIC DATA

ALPHA = .. RUDDER = -2..UU
ELEVON = .. RUDFLR = .UUU

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -7.97U

X/LB	1.UU1
PHI	
110.UUU	-.1800
120.UUU	-.1240

MACH (1) = .6U0 BETA (2) = -3.93U

X/LB	1.UU1
PHI	
110.UUU	-.1940
120.UUU	-.1480

MACH (1) = .599 BETA (3) = .10U

X/LB	1.UU1
PHI	
110.UUU	-.2160
120.UUU	-.1710

MACH (1) = .6U1 BETA (4) = 4.21U

X/LB	1.UU1
PHI	
110.UUU	-.2400
120.UUU	-.2040

MACH (1) = .598 BETA (5) = 8.33U

X/LB	1.UU1
PHI	
110.UUU	-.2420
120.UUU	-.2310

MACH (2) = .901 BETA (1) = -8.09U

X/LB	1.UU1
PHI	
110.UUU	-.2UUU
120.UUU	-.1540

MACH (2) = .900 BETA (2) = -4.UUU

X/LB	...U1
PHI	
110.UUU	-.22U0
120.UUU	-.15U0

MACH (2) = .900 BETA (3) = .10U

X/LB	1.UU1
PHI	
110.UUU	-.2350
120.UUU	-.1750

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7D7 OA12 OBA OMS POD OUTSIDE (RBPH12)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = .9[illegible] BETA (4) = 4.28[illegible]

X/LB	1.[illegible]01
PHI	
11[illegible].[illegible]00	-.243[illegible]
12[illegible].[illegible]00	-.2[illegible]40

MACH (2) = .903 BETA (5) = 0.45[illegible]

X/LB	1.[illegible]01
PHI	
11[illegible].[illegible]00	-.262[illegible]
12[illegible].[illegible]00	-.225[illegible]

DATE 10 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 OEA OMS POD OUTSIDE (RBPM13) (01 MAY 73)

REFERENCE DATA

SREF = 2.421U SQ.FT. XMRP = 28.53U6 INCHES
LREF = 39.849U INCHES YMRP = .1UUU INCHES
BREF = 39.849U INCHES ZMRP = .1UUU INCHES
SCALE = .13U6 SCALE

PARAMETRIC DATA

ALPHA = 5.UUU RUDDER = -2U.UUU
ELEVON = .UUU RUDFLR = .UUU

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -8.U3U X/LB 1.UU1
PHI
11U.UUU -.159U
12U.UUU -.12UU

MACH (1) = .599 BETA (2) = -3.97U X/LB 1.UU1
PHI
11U.UUU -.183U
12U.UUU -.141U

MACH (1) = .598 BETA (3) = .1UU X/LB 1.UU1
PHI
11U.UUU -.21UU
12U.UUU -.167U

MACH (1) = .599 BETA (4) = 4.18U X/LB 1.UU1
PHI
11U.UUU -.227U
12U.UUU -.18UU

MACH (1) = .6UU BETA (5) = 8.27U X/LB 1.UU1
PHI
11U.UUU -.25UU
12U.UUU -.214U

MACH (2) = .9U7 BETA (1) = -8.14U X/LB 1.UU1
PHI
11U.UUU -.163U
12U.UUU -.119U

MACH (2) = .899 BETA (2) = -4.UUU X/LB 1.UU1
PHI
11U.UUU -.189U
12U.UUU -.144U

MACH (2) = .9U1 BETA (3) = .1UU X/LB 1.UU1
PHI
11U.UUU -.21UU
12U.UUU -.168U

DATE 10 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 OBA OMS POD OUTSIDE (RBPM13)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = .903 BETA (4) = 4.230

X/LB	1.001
PHI	
115.000	-.2270
120.000	-.1970

MACH (2) = .902 BETA (5) = 8.380

X/LB	1.001
PHI	
115.000	-.2610
120.000	-.1910

AMES 11-7X7 OA12 OA OMS POD OUTSIDE (FSPM14) (1 MAY 73)

REFERENCE DATA

SREF = 8.421[illegible] SQ.FT. XMPP = 20.530[illegible] INCHES
LREF = 39.849[illegible] INCHES YMPP = .0000 INCHES
BREF = 39.849[illegible] INCHES ZMPP = .0000 INCHES
SCALE = .[illegible] SCALE

PARAMETRIC DATA

ALPHA = [illegible] RUDDER = -20.000
ELEVON = .[illegible] BODFLP = .000

SECTION (1) OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .999 BETA (1) = -8.060 X/LB 1.001
PHI
110.000 -.1720
120.000 -.1300

MACH (1) = .[illegible] BETA (2) = -3.980 X/LB 1.001
PHI
110.000 -.1850
12[illegible].000 -.1490

MACH (1) = .999 BETA (3) = .050 X/LB 1.001
PHI
110.000 -.2050
12[illegible].000 -.1620

MACH (1) = .999 BETA (4) = 4.170 X/LB 1.001
PHI
110.000 -.2260
120.000 -.1790

MACH (1) = .[illegible] BETA (5) = 8.230 X/LB 1.001
PHI
11[illegible].000 -.2520
12[illegible].000 -.2160

MACH (2) = .902 BETA (1) = -8.150 X/LB 1.001
PHI
110.000 -.2080
120.000 -.1510

MACH (2) = .[illegible] BETA (2) = -4.040 X/LB 1.001
PHI
110.000 -.2240
120.000 -.1780

MACH (2) = .899 BETA (3) = .050 X/LB 1.001
PHI
110.000 -.2410
12[illegible].000 -.1890

AMES 11-70? OA12 OEA OMS POD OUTSIDE (RBFM14)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = .9?. BETA (4) = 4.21? X/LB 1.?01

PHI	
110.???	-.2?1?
120.???	-.1???

MACH (2) = .9?? BETA (9) = ?.??? X/LB 1.?01

PHI	
110.???	-.2?1?
120.???	-.2???

AMES 11-FT? OA12 OEA OMS POD OUTSIDE (RBPM15) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] 90.FT. XMRP = 28.55[illegible] INCHES
LREF = 39.869[illegible] INCHES YMRP = .[illegible] INCHES
BREF = 39.869[illegible] INCHES ZMRP = .[illegible] INCHES
SCALE = .03[illegible] SCALE

PARAMETRIC DATA

ALPHA = 15.[illegible] RUDDEF = -2[illegible]
ELEVON = .[illegible] RUDFLR = .[illegible]

SECTION (1)OMS POD OUTSIDE

DEPENDENT VARIABLE CP

MACH (1) = .6[illegible] BETA (1) = -8.[illegible]

X/LB	1.[illegible]
PHI	
11[illegible].[illegible]	-.22[illegible]
12[illegible].[illegible]	-.15[illegible]

MACH (1) = .999 BETA (2) = -3.97[illegible]

X/LB	1.[illegible]
PHI	
11[illegible].[illegible]	-.25[illegible]
12[illegible].[illegible]	-.18[illegible]

MACH (1) = .6[illegible] BETA (3) = .1[illegible]

X/LB	1.[illegible]
PHI	
11[illegible].[illegible]	-.26[illegible]
12[illegible].[illegible]	-.21[illegible]

MACH (1) = .900 BETA (4) = 4.18[illegible]

X/LB	1.[illegible]
PHI	
11[illegible].[illegible]	-.27[illegible]
12[illegible].[illegible]	-.23[illegible]

MACH (1) = .900 BETA (5) = 8.28[illegible]

X/LB	1.[illegible]
PHI	
11[illegible].[illegible]	-.27[illegible]
12[illegible].[illegible]	-.28[illegible]

MACH (2) = .9[illegible] BETA (1) = -8.12[illegible]

X/LB	1.[illegible]
PHI	
11[illegible].[illegible]	-.27[illegible]
12[illegible].[illegible]	-.19[illegible]

MACH (2) = .9[illegible] BETA (2) = -4.01[illegible]

X/LB	1.[illegible]
PHI	
11[illegible].[illegible]	-.25[illegible]
12[illegible].[illegible]	-.14[illegible]

MACH (2) = .000 BETA (3) = .05[illegible]

X/LB	1.[illegible]
PHI	
11[illegible].[illegible]	-.25[illegible]
12[illegible].[illegible]	-.14[illegible]

DATE 10 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-FT OA12 CRA CMS POD OUTSIDE (RBFM15)

SECTION (1)CMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = .099 BETA (4) = 4.21

X/LB	1.001
PHI	
115.000	-.272
125.000	-.248

MACH (2) = .098 BETA (5) = 8.34

X/LB	1.001
PHI	
115.000	-.251
125.000	-.254

AMES 11-7X7 OA12 OEA OMS POD OUTSIDE (RDPM16) (01 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.53[illegible] INCHES
LREF = 99.049[illegible] INCHES YMRP = .[illegible] INCHES
BREF = 99.049[illegible] INCHES ZMRP = .[illegible] INCHES
SCALE = .03[illegible] SCALE

PARAMETRIC DATA

ALPHA = [illegible] RUDDER = -2[illegible]
ELEVON = .[illegible] RUDFLR = .[illegible]

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .999 BETA (1) = -7.99[illegible] X/LB 1.[illegible]
PHI
11[illegible] -.293[illegible]
12[illegible] -.165[illegible]

MACH (1) = .998 BETA (2) = -3.99[illegible] X/LB 1.[illegible]
PHI
11[illegible] -.317[illegible]
12[illegible] -.257[illegible]

MACH (1) = .[illegible] BETA (3) = .1[illegible] X/LB 1.[illegible]
PHI
11[illegible] -.358[illegible]
12[illegible] -.285[illegible]

MACH (1) = .997 BETA (4) = 4.21[illegible] X/LB 1.[illegible]
PHI
11[illegible] -.363[illegible]
12[illegible] -.290[illegible]

MACH (1) = .[illegible] BETA (5) = 8.38[illegible] X/LB 1.[illegible]
PHI
11[illegible] -.358[illegible]
12[illegible] -.287[illegible]

MACH (2) = .998 BETA (1) = -0.08[illegible] X/LB 1.[illegible]
PHI
11[illegible] -.348[illegible]
12[illegible] -.299[illegible]

MACH (2) = .997 BETA (2) = -3.98[illegible] X/LB 1.[illegible]
PHI
11[illegible] -.307[illegible]
12[illegible] -.2[illegible]

MACH (2) = .997 BETA (3) = .08[illegible] X/LB 1.[illegible]
PHI
11[illegible] -.401[illegible]
12[illegible] -.359[illegible]

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-FT OA12 OEA OMS POD OUTSIDE (RBPM16)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = .096 BETA (4) = 4.260 X/LB 1.000

PHI	
110.000	-.399
120.000	-.388

MACH (2) = .099 BETA (5) = 0.370 X/LB 1.000

PHI	
110.000	-.468
120.000	-.429

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPM17) (01 MAY 73)

AMES 11-7U7 OA12 OEA OMS POD OUTSIDE

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000
ELEVON = 10.000 TUDFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 20.5300 INCHES
LREF = 59.0490 INCHES YMRP = .0000 INCHES
BREF = 59.0490 INCHES ZMRP = .0000 INCHES
SCALE = .0500 SCALE

SECTION (1)OMS POD OUTSIDE

DEPENDENT VARIABLE CP

MACH (1) = .997 BETA (1) =-10.000

X/LB	1.001
PHI	
110.000	-.2100
120.000	-.1490

MACH (1) = .998 BETA (2) = .000

X/LB	1.001
PHI	
110.000	-.2420
120.000	-.2130

MACH (1) = .000 BETA (3) = 10.370

X/LB	1.001
PHI	
110.000	-.2910
120.000	-.2940

MACH (=, = .901 BETA (1) =-10.120

X/LB	1.001
PHI	
110.000	-.2410
120.000	-.1920

MACH (2) = .000 BETA (2) = .000

X/LB	1.001
PHI	
110.000	-.2590
120.000	-.2100

MACH (2) = .903 BETA (3) = 10.490

X/LB	1.001
PHI	
110.000	-.2510
120.000	-.2770

DATE 28 SEP 73 TABULATED PRESSURE DATA - OA12A

JOBS 11-707 OA12 OBA OMS POD OUTSIDE (RBPM18) (01 MAY 73)

REFERENCE DATA

SREF =	2.421	SQ.FT.	XMRP =	28.530	INCHES
LREF =	39.849	INCHES	YMRP =	.000	INCHES
BREF =	39.849	INCHES	ZMRP =	.000	INCHES
SCALE =	.030	SCALE			

PARAMETRIC DATA

ALPHA =	5.000	RUDDER =	.000
ELEVON =	10.000	RUDFLR =	.000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .999 BETA (1) =-10.070

X/LB	1.000
PHI	
110.000	-.1990
120.000	-.1420

MACH (1) = .998 BETA (2) = .080

X/LB	1.001
PHI	
110.000	-.2410
120.000	-.2420

MACH (1) = .998 BETA (3) = 10.300

X/LB	1.001
PHI	
110.000	-.2840
120.000	-.2910

MACH (2) = .899 BETA (1) =-10.190

X/LB	1.001
PHI	
110.000	-.2100
120.000	-.1370

MACH (2) = .901 BETA (2) = .080

X/LB	1.001
PHI	
110.000	-.2360
120.000	-.1960

MACH (2) = .899 BETA (3) = 10.420

X/LB	1.001
PHI	
110.000	-.2510
120.000	-.2470

AMES 11-7X7 OA12 OEA OMS POD OUTSIDE (RBFM19) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 20.5300 INCHES
LREF = 99.8490 INCHES YMRP = .0000 INCHES
BREF = 99.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 10.000 RUDDER = .000
ELEVON = 10.000 RUDFLR = .000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .999 BETA (1) =-10.110

X/LB	1.001
PHI	
110.000	-.2140
120.000	-.1440

MACH (1) = .997 BETA (2) = .080

X/LB	1.001
PHI	
110.000	-.2420
120.000	-.1980

MACH (1) = .999 BETA (3) = 10.270

X/LB	1.001
PHI	
110.000	-.3130
120.000	-.2860

MACH (2) = .904 BETA (1) =-10.210

X/LB	1.001
PHI	
110.000	-.2480
120.000	-.1740

MACH (2) = .896 BETA (2) = .090

X/LB	1.001
PHI	
110.000	-.2810
120.000	-.2630

MACH (2) = .897 BETA (3) = 10.390

X/LB	1.001
PHI	
110.000	-.3000
120.000	-.3500

AMES 11-7X7 OA12 02A OMS POD OUTSIDE (RBPM2U) (01 MAY 73)

REFERENCE DATA

SREF =	2.4219 SQ.FT.	XMRP =	28.5330 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0350 SCALE				

PARAMETRIC DATA

ALPHA =	15.000	RUDDER =	.000
ELEVON =	10.000	RUDFLR =	.000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) =-10.080 X/LB 1.001

PHI	
110.000	-.2600
120.000	-.1690

MACH (1) = .599 BETA (2) = .080 X/LB 1.001

PHI	
110.000	-.3230
120.000	-.2620

MACH (1) = .599 BETA (3) = 10.290 X/LB 1.001

PHI	
110.000	-.3410
120.000	-.3340

MACH (2) = .902 BETA (1) =-10.190 X/LB 1.001

PHI	
110.000	-.2450
120.000	-.1390

MACH (2) = .900 BETA (2) = .070 X/LB 1.001

PHI	
110.000	-.2710
120.000	-.3350

MACH (2) = .902 BETA (3) = 10.380 X/LB 1.001

PHI	
110.000	-.3120
120.000	-.3580

AMES 11-707 OA12 OEA OMS POD OUTSIDE (RBPM21) (01 MAY 73)

REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 28.5350 INCHES
LREF = 39.8495 INCHES YMRP = .0000 INCHES
BREF = 39.8495 INCHES ZMRP = .0000 INCHES
SCALE = .0310 SCALE

PARAMETRIC DATA

ALPHA = [illegible] RUDDER = .000
ELEVON = 10.000 RUDFLR = .000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) =-10.030 X/LB 1.001
PHI
110.000 -.3370
120.000 -.1780

MACH (1) = .601 BETA (2) = .070 X/LB 1.001
PHI
110.000 -.3890
120.000 -.3110

MACH (1) = .598 BETA (3) = 10.370 X/LB 1.001
PHI
110.000 -.3930
120.000 -.4130

MACH (2) = .902 BETA (1) =-10.100 X/LB 1.001
PHI
110.000 -.4530
120.000 -.2870

MACH (2) = .894 BETA (2) = .080 X/LB 1.001
PHI
110.000 -.4320
120.000 -.3440

MACH (2) = .901 BETA (3) = 10.420 X/LB 1.001
PHI
110.000 -.4440
120.000 -.4730

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7ft OA12 OEA OMS POD OUTSIDE (RBPM22) (01 MAY 73)

REFERENCE DATA

AREF =	2.4219 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	59.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	59.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHA =	.000	RUDDER =	.000
ELEVON =	-15.000	RUDFLR =	.000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .998 BETA (1) = -7.970

X/LB	1.001
PHI	
110.000	-.1390
120.000	-.1900

MACH (1) = .999 BETA (2) = -3.940

X/LB	1.001
PHI	
110.000	-.1450
120.000	-.1110

MACH (1) = .997 BETA (3) = .080

X/LB	1.001
PHI	
110.000	-.1480
120.000	-.1310

MACH (1) = .996 BETA (4) = 4.200

X/LB	1.001
PHI	
110.000	-.1790
120.000	-.1430

MACH (1) = .997 BETA (5) = 8.300

X/LB	1.001
PHI	
110.000	-.1870
120.000	-.1660

MACH (2) = .994 BETA (1) = -8.080

X/LB	1.001
PHI	
110.000	-.1800
120.000	-.1350

MACH (2) = .995 BETA (2) = -4.000

X/LB	1.001
PHI	
110.000	-.1660
120.000	-.1580

MACH (2) = .998 BETA (3) = .080

X/LB	1.001
PHI	
110.000	-.1980
120.000	-.1720

AMES 11-7U7 OA12 OBA OMS POD OUTSIDE (RBPM22)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = .899 BETA (4) = 4.250 X/LB 1.001

PHI	
110.000	-.2320
120.000	-.1930

MACH (2) = .946 BETA (5) = 8.410 X/LB 1.001

PHI	
110.000	-.2250
120.000	-.2020

AMES 11-707 OA12 OEA OMS POD OUTSIDE (RBPM23) (01 MAY 73)

REFERENCE DATA

SREF = 2.4219 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000
ELEVON = -10.000 RUDFLR = .000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .998 BETA (1) = -8.030 X/LB 1.001
PHI
110.000 -.1450
120.000 -.1450

MACH (1) = .998 BETA (2) = -3.970 X/LB 1.001
PHI
110.000 -.1370
120.000 -.1160

MACH (1) = .999 BETA (3) = .080 X/LB 1.001
PHI
110.000 -.1260
120.000 -.1260

MACH (1) = .998 BETA (4) = 4.170 X/LB 1.001
PHI
110.000 -.1680
120.000 -.1430

MACH (1) = .998 BETA (5) = 8.250 X/LB 1.001
PHI
110.000 -.1670
120.000 -.1530

MACH (2) = .903 BETA (1) = -8.140 X/LB 1.001
PHI
110.000 -.1610
120.000 -.1290

MACH (2) = .902 BETA (2) = -4.090 X/LB 1.001
PHI
110.000 -.1710
120.000 -.1420

MACH (2) = .901 BETA (3) = .090 X/LB 1.001
PHI
110.000 -.1790
120.000 -.1580

AMES 11-707 OA12 OBA OMS POD OUTSIDE (RBPM23)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = .903 BETA (4) = 4.220

X/LB	1.001
PHI	
110.000	-.2140
120.000	-.1810

MACH (2) = .901 BETA (5) = 8.350

X/LB	1.001
PHI	
110.000	-.2280
120.000	-.1920

AMES 11-FT OA12 OPA OMS POD OUTSIDE (RBPM24) (01 MAY 73)

REFERENCE DATA

SREF =	2.421[illegible] SQ.FT.	XMRP =	28.530[illegible] INCHES		
LREF =	39.849[illegible] INCHES	YMRP =	.[illegible] INCHES		
BREF =	39.849[illegible] INCHES	ZMRP =	.[illegible] INCHES		
SCALE =	.[illegible] SCALE				

PARAMETRIC DATA

ALPHA =	10.[illegible]	RUDDER =	.[illegible]
ELEVON =	-15.[illegible]	RUDFLR =	.[illegible]

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .997 BETA (1) = -0.080

X/LB	1.001
PHI	
110.000	-.1580
120.000	-.1380

MACH (1) = .999 BETA (2) = -3.990

X/LB	1.001
PHI	
110.000	-.1510
120.000	-.1280

MACH (1) = .600 BETA (3) = .080

X/LB	1.001
PHI	
110.000	-.1390
120.000	-.1300

MACH (1) = .998 BETA (4) = 4.150

X/LB	1.001
PHI	
110.000	-.1620
120.000	-.1470

MACH (1) = .999 BETA (5) = 8.230

X/LB	1.001
PHI	
110.000	-.1820
120.000	-.1615

MACH (2) = .900 BETA (1) = -0.150

X/LB	1.001
PHI	
110.000	-.1850
120.000	-.1420

MACH (2) = .900 BETA (2) = -4.050

X/LB	1.001
PHI	
110.000	-.1750
120.000	-.1480

MACH (2) = .899 BETA (3) = .080

X/LB	1.001
PHI	
110.000	-.1979
120.000	-.1670

AMES 11-7X7 OA12 CBA OMS POD OUTSIDE (RBPM24)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = .9.2 BETA (4) = 4.19X

X/LB	1.1.1
PHI	
11.....	-.23X
12.....	-.21X

MACH (2) = .9.X BETA (5) = 8.33X

X/LB	1.1.1
PHI	
11.....	-.25X
12.....	-.21X

AMES 11-7ft OA12 OEA OMS POD OUTSIDE (RBPM25) (01 MAY 73)

REFERENCE DATA

SREF = 2.421% SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.049% INCHES YMRP = .0000 INCHES
BREF = 39.049% INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 15.000 RUDDER = .000
ELEVON = -10.000 RUDFLR = .000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .998 BETA (1) = -8.040 X/LB 1.001
PHI
110.000 -.1820
120.000 -.1190

MACH (1) = .998 BETA (2) = -3.990 X/LB 1.001
PHI
110.000 -.1850
120.000 -.1400

MACH (1) = .997 BETA (3) = .080 X/LB 1.001
PHI
110.000 -.2120
120.000 -.1590

MACH (1) = .801 BETA (4) = 4.180 X/LB 1.001
PHI
110.000 -.2340
120.000 -.1830

MACH (1) = .801 BETA (5) = 8.250 X/LB 1.001
PHI
110.000 -.2370
120.000 -.2070

MACH (2) = .902 BETA (1) = -8.130 X/LB 1.001
PHI
110.000 -.2210
120.000 -.1510

MACH (2) = .901 BETA (2) = -4.020 X/LB 1.001
PHI
110.000 -.2260
120.000 -.1700

MACH (2) = .902 BETA (3) = .080 X/LB 1.001
PHI
110.000 -.2430
120.000 -.2010

AMES 11-707 OA12 OEA OMS POD OUTSIDE (RBPM25)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = .898 BETA (4) = 4.190

	X/LB 1.001
PHI	
110.000	-.2710
120.000	-.2260

MACH (2) = .899 BETA (5) = 8.330

	X/LB 1.001
PHI	
110.000	-.2910
120.000	-.2230

AMES 11-FT OA12 OEA OMS POD OUTSIDE (RBPM26) (01 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHA =	20.000	RUDDER =	.000
ELEVON =	-10.000	RUDFLR =	.000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .997 BETA (1) = -7.980

X/LB	1.001
PHI	
110.000	-.2360
120.000	-.1250

MACH (1) = .998 BETA (2) = -3.980

X/LB	1.001
PHI	
110.000	-.2590
120.000	-.1680

MACH (1) = .800 BETA (3) = .070

X/LB	1.001
PHI	
110.000	-.2960
120.000	-.2140

MACH (1) = .996 BETA (4) = 4.190

X/LB	1.001
PHI	
110.000	-.2930
120.000	-.2390

MACH (1) = .999 BETA (5) = 8.300

X/LB	1.001
PHI	
110.000	-.2870
120.000	-.2660

MACH (2) = .903 BETA (1) = -8.070

X/LB	1.001
PHI	
110.000	-.3540
120.000	-.2350

MACH (2) = .901 BETA (2) = -3.990

X/LB	1.001
PHI	
110.000	-.3650
120.000	-.2750

MACH (2) = .899 BETA (3) = .080

X/LB	1.001
PHI	
110.000	-.3630
120.000	-.3210

AMES 11-7X7 OA12 OEA OMS POD OUTSIDE (RBPM26)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = .898 BETA (4) = 4.230

X/LB	1.[illegible]
PHI	
110.000	-.3850
120.000	-.3660

MACH (2) = .9[illegible] BETA (5) = 8.380

X/LB	1.001
PHI	
110.000	-.3650
120.000	-.3[illegible]

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-FT OA12 OEA OMS POD OUTSIDE (RBPN27) (01 MAY 73)

REFERENCE DATA

SREF =	2.4210	SQ.FT.	XMRP =	20.5300	INCHES
LREF =	39.0490	INCHES	YMRP =	.0000	INCHES
BREF =	39.0490	INCHES	ZMRP =	.0000	INCHES
SCALE =	.0312	SCALE			

PARAMETRIC DATA

ALPHA =	-4.000	RUDDER =	.000
ELEVON =	-20.000	RUDFLR =	.000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -4.910

X/LB	1.001
PHI	
110.000	-.1490
120.000	-.1290

MACH (1) = .589 BETA (2) = .080

X/LB	1.001
PHI	
110.000	-.1410
120.000	-.1290

MACH (1) = .599 BETA (3) = 5.280

X/LB	1.001
PHI	
110.000	-.1560
120.000	-.1340

MACH (2) = .897 BETA (1) = -4.980

X/LB	1.001
PHI	
110.000	-.2290
120.000	-.1930

MACH (2) = .886 BETA (2) = .080

X/LB	1.001
PHI	
110.000	-.2230
120.000	-.1970

MACH (2) = .898 BETA (3) = 5.330

X/LB	1.001
PHI	
110.000	-.2450
120.000	-.2140

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-FT OA12 OEA OMS POD OUTSIDE (REMPSI) (31 MAY 73)

REFERENCE DATA

PARAMETRIC DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.3[illegible] INCHES
LREF = 39.849[illegible] INCHES YMRP = .000[illegible] INCHES
BREF = 39.849[illegible] INCHES ZMRP = .000[illegible] INCHES
SCALE = .03[illegible] SCALE

ALPHA = [illegible] RUDDEF = [illegible]
ELEVON = [illegible] RUDFLR = [illegible]

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .597 BETA (1) = -7.970

X/LB	1.001
PHI	
110.000	-.1370
120.000	-.1240

MACH (1) = .596 BETA (2) = -3.960

X/LB	1.001
PHI	
110.000	-.1460
120.000	-.1270

MACH (1) = .598 BETA (3) = .090

X/LB	1.001
PHI	
110.000	-.1410
120.000	-.1340

MACH (1) = .595 BETA (4) = 4.190

X/LB	1.001
PHI	
110.000	-.1460
120.000	-.1320

MACH (1) = .598 BETA (5) = 8.290

X/LB	1.001
PHI	
110.000	-.1520
120.000	-.1310

MACH (2) = .900 BETA (1) = -8.080

X/LB	1.001
PHI	
110.000	-.2270
120.000	-.1870

MACH (2) = .897 BETA (2) = -4.000

X/LB	1.001
PHI	
110.000	-.2260
120.000	-.1980

MACH (2) = .900 BETA (3) = .080

X/LB	1.001
PHI	
110.000	-.2370
120.000	-.2150

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A (RBPM28)

AMES 11-707 OA12 O2A OMS POD OUTSIDE

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = .904 BETA (4) = 4.240

X/LB	1.001
PHI	
110.000	-.2390
120.000	-.2220

MACH (2) = .904 BETA (5) = 8.480

X/LB	1.001
PHI	
110.000	-.2460
120.000	-.2270

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7BT OA12 O2A OMS POD OUTSIDE (RBPM29) (01 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.9490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHA =	5.000	RUDDER =	.000
ELEVON =	-20.000	RUDFLR =	.000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -8.030 X/LB 1.001

PHI	
110.000	-.1330
120.000	-.1320

MACH (1) = .598 BETA (2) = -3.980 X/LB 1.001

PHI	
110.000	-.1260
120.000	-.1330

MACH (1) = .598 BETA (3) = .080 X/LB 1.001

PHI	
110.000	-.1400
120.000	-.1340

MACH (1) = .600 BETA (4) = 4.160 X/LB 1.001

PHI	
110.000	-.1470
120.000	-.1140

MACH (1) = .597 BETA (5) = 8.250 X/LB 1.001

PHI	
110.000	-.1320
120.000	-.1300

MACH (2) = .898 BETA (1) = -8.130 X/LB 1.001

PHI	
110.000	-.2040
120.000	-.1840

MACH (2) = .902 BETA (2) = -4.020 X/LB 1.001

PHI	
110.000	-.1970
120.000	-.1670

MACH (2) = .899 BETA (3) = .080 X/LB 1.001

PHI	
110.000	-.2130
120.000	-.1900

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7X7 OA12 OEA OMS POD OUTSIDE (RBPM29)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = .897 BETA (4) = 4.210

X/LB	1.001
PHI	
115.000	-.2240
120.000	-.2090

MACH (2) = .896 BETA (5) = 8.340

X/LB	1.001
PHI	
115.000	-.2420
120.000	-.2290

AMES 11-7ft OA12 OA OMS POD OUTSIDE (FBFM30) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5310 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0314 SCALE

PARAMETRIC DATA

ALPHA = 10.000 RUDDER = .000
ELEVON = -20.000 RUDFLR = .000

SECTION (1)OMS POD OUTSIDE

DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -8.050

X/LB	1.001
PHI	
110.000	-.1630
120.000	-.1610

MACH (1) = .599 BETA (2) = -3.980

X/LB	1.001
PHI	
110.000	-.1380
120.000	-.1440

MACH (1) = .598 BETA (3) = .080

X/LB	1.001
PHI	
110.000	-.1450
120.000	-.1420

MACH (1) = .598 BETA (4) = 4.150

X/LB	1.001
PHI	
110.000	-.1630
120.000	-.1490

MACH (1) = .598 BETA (5) = 8.230

X/LB	1.001
PHI	
110.000	-.1550
120.000	-.1400

MACH (2) = .901 BETA (1) = -8.160

X/LB	1.001
PHI	
110.000	-.1910
120.000	-.1710

MACH (2) = .901 BETA (2) = -4.040

X/LB	1.001
PHI	
110.000	-.1910
120.000	-.1740

MACH (2) = .903 BETA (3) = .080

X/LB	1.001
PHI	
110.000	-.2130
120.000	-.1950

AMES 11-7?7 OA12 O2A CMS POD OUTSIDE (RBPM30)

SECTION (1)CMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = .942 BETA (4) = 4.190

X/LB	1.001
PHI	
110.000	-.2530
120.000	-.2240

MACH (2) = .945 BETA (5) = 0.320

X/LB	1.001
PHI	
110.000	-.2640
120.000	-.2550

AMES 11-7BT OA12 OBA OMS POD OUTSIDE (RBPM31) (31 MAY 79)

REFERENCE DATA

SREF =	2.421[illegible] SQ.FT.	XMRP =	28.531[illegible] INCHES		
LREF =	39.849[illegible] INCHES	YMRP =	.[illegible] INCHES		
BREF =	39.849[illegible] INCHES	ZMRP =	.[illegible] INCHES		
SCALE =	.[illegible] SCALE				

PARAMETRIC DATA

ALPHA =	15.[illegible]	RUDDER =	.[illegible]
ELEVON =	-2[illegible].[illegible]	RUDFLR =	.[illegible]

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .8[illegible] BETA (1) = -8.[illegible]

X/LB	1.001
PHI	
110.000	-.1850
120.[illegible]	-.1340

MACH (1) = .998 BETA (2) = -3.980

X/LB	1.[illegible]1
PHI	
110.000	-.1720
120.000	-.1340

MACH (1) = .998 BETA (3) = .[illegible]80

X/LB	1.[illegible]1
PHI	
110.000	-.1690
120.000	-.1480

MACH (1) = .999 BETA (4) = 4.170

X/LB	1 [illegible]01
PHI	
110.000	-.1770
120.000	-.1530

MACH (1) = .997 BETA (5) = 8.240

X/LB	1.[illegible]1
PHI	
110.000	-.1910
120.000	-.1540

MACH (2) = .898 BETA (1) = -8.130

X/LB	1.[illegible]1
PHI	
110.000	-.2280
120.000	-.1500

MACH (2) = .901 BETA (2) = -4.080

X/LB	1.001
PHI	
110.000	-.2090
120.000	-.1660

MACH (2) = .901 BETA (3) = .080

X/LB	1.001
PHI	
110.000	-.[illegible]30
120.000	-.2140

AMES 11-7U7 OA12 OEA OMS POD OUTSIDE (RBPM31)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = .897 BETA (4) = 4.200

X/LB	1.001
PHI	
115.000	-.2580
120.000	-.2290

MACH (2) = .898 BETA (5) = 8.330

X/LB	1.001
PHI	
115.000	-.2860
120.000	-.2550

AMES 11-7x7 OA12 OEA OMS POD OUTSIDE (REPM02) (01 MAY 73)

REFERENCE DATA

SREF = 8.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.0490 INCHES YMRP = .0000 INCHES
BREF = 39.0490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 25.000 RUDDER = .000
ELEVON = -25.000 RUDFLR = .000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .810 BETA (1) = -7.980 X/LB 1.001
PHI
110.000 -.2200
120.000 -.1130

MACH (1) = .897 BETA (2) = -3.950 X/LB 1.001
PHI
110.000 -.2180
120.000 -.1390

MACH (1) = .899 BETA (3) = .070 X/LB 1.001
PHI
110.000 -.2510
120.000 -.1760

MACH (1) = .898 BETA (4) = 4.190 X/LB 1.001
PHI
110.000 -.2560
120.000 -.1990

MACH (1) = .800 BETA (5) = 8.290 X/LB 1.001
PHI
110.000 -.2560
120.000 -.2100

MACH (2) = .902 BETA (1) = -8.070 X/LB 1.001
PHI
110.000 -.3430
120.000 -.2060

MACH (2) = .898 BETA (2) = -4.000 X/LB 1.001
PHI
110.000 -.3300
120.000 -.2480

MACH (2) = .905 BETA (3) = .070 X/LB 1.001
PHI
110.000 -.3370
120.000 -.3060

AMES 11-7U7 OA12 OEA OMS POD OUTSIDE (RBPM32)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = .897 BETA (4) = 4.220

X/LB	1.001
PHI	
119.000	-.3690
120.000	-.3570

MACH (2) = .901 BETA (5) = 8.360

X/LB	1.001
PHI	
119.000	-.3740
120.000	-.3570

AMES 11-707 OA12 OEA OMS POD OUTSIDE (RBPM33) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5350 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0500 SCALE

PARAMETRIC DATA

ALPHA = -4.000 RUDDER = .000
ELEVON = .000 RUDFLP = 40.000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -4.910

X/LB	1.001
PHI	
110.000	-.2170
120.000	-.1720

MACH (1) = .599 BETA (2) = .080

X/LB	1.001
PHI	
110.000	-.2630
120.000	-.2170

MACH (1) = .598 BETA (3) = 5.260

X/LB	1.001
PHI	
110.000	-.2630
120.000	-.2500

MACH (2) = .899 BETA (1) = -4.990

X/LB	1.001
PHI	
110.000	-.2430
120.000	-.1540

MACH (2) = .899 BETA (2) = .080

X/LB	1.001
PHI	
110.000	-.2750
120.000	-.1980

MACH (2) = .900 BETA (3) = 5.5[illegible]

X/LB	1.001
PHI	
110.000	-.2870
120.000	-.2530

AMES 11-7X7 OA12 OBA OMS POD OUTSIDE (RB-W34) (01 MAY 73)

REFERENCE DATA

SREF =	2.421[illegible] SQ.FT.	XMRP =	28.530[illegible] INCHES		
LREF =	39.849[illegible] INCHES	YMRP =	.[illegible] INCHES		
BREF =	39.849[illegible] INCHES	ZMRP =	.[illegible] INCHES		
SCALE =	.[illegible] SCALE				

PARAMETRIC DATA

ALPHA =	.[illegible]	RUDDER =	.[illegible]
ELEVON =	.[illegible]	RUDFLR =	[illegible].[illegible]

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -7.990

X/LB	1.001
PHI	
110.000	-.2040
120.000	-.1470

MACH (1) = .599 BETA (2) = -3.950

X/LB	1.001
PHI	
110.000	-.1230
120.000	-.1560

MACH (1) = .599 BETA (3) = .090

X/LB	1.001
PHI	
110.000	-.2490
120.000	-.1970

MACH (1) = .599 BETA (4) = 4.200

X/LB	1.001
PHI	
110.000	-.2470
120.000	-.2190

MACH (1) = .599 BETA (5) = 8.310

X/LB	1.001
PHI	
110.000	-.2740
120.000	-.2560

MACH (2) = .899 BETA (1) = -8.100

X/LB	1.001
PHI	
110.000	-.2060
120.000	-.1340

MACH (2) = .897 BETA (2) = -4.010

X/LB	1.001
PHI	
110.000	-.2220
120.000	-.1510

MACH (2) = .898 BETA (3) = .080

X/LB	1.001
PHI	
110.000	-.2520
120.000	-.1670

AMES 11-7U7 OA12 O2A OMS POD OUTSIDE (RBPM34)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = .896 BETA (4) = 4.250

X/LB	1.001
PHI	
110.000	-.2730
120.000	-.2070

MACH (2) = .901 BETA (5) = 8.430

X/LB	1.001
PHI	
110.000	-.2810
120.000	-.2190

AMES 11-7ft OA12 OA OMS POD OUTSIDE (RBPM35) (01 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHA =	5.000	RUDDER =	.000
ELEVON =	.000	RUDFLR =	40.000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -8.040

X/LB	1.001
PHI	
110.000	-.1970
120.000	-.1440

MACH (1) = .599 BETA (2) = -3.980

X/LB	1.001
PHI	
110.000	-.1970
120.000	-.1650

MACH (1) = .599 BETA (3) = .080

X/LB	1.001
PHI	
110.000	-.2130
120.000	-.1830

MACH (1) = .599 BETA (4) = 4.170

X/LB	1.001
PHI	
110.000	-.2540
120.000	-.2090

MACH (1) = .600 BETA (5) = 8.260

X/LB	1.001
PHI	
110.000	-.2710
120.000	-.2360

MACH (2) = .903 BETA (1) = -8.160

X/LB	1.001
PHI	
110.000	-.2000
120.000	-.1250

MACH (2) = .902 BETA (2) = -4.040

X/LB	1.001
PHI	
110.000	-.2070
120.000	-.1450

MACH (2) = .904 BETA (3) = .080

X/LB	1.001
PHI	
110.000	-.2330
120.000	-.1690

AMES 11-7U7 OA12 O2A OMS POD OUTSIDE (DB=W35)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = .902 BETA (4) = 4.22U

X/LS	1.161
PHI	
110.000	-.269U
120.000	-.201U

MACH (2) = .898 BETA (5) = 8.37U

X/LB	1.161
PHI	
110.000	-.281U
120.000	-.211U

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7ft OA12 O2A OMS POD OUTSIDE (RBPM36) (01 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHA =	10.000	RUDDER =	.000
ELEVON =	.000	RUDFLR =	40.000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) = -8.070

X/LB	1.001
PHI	
110.000	-.1910
120.000	-.1510

MACH (1) = .598 BETA (2) = -3.990

X/LB	1.001
PHI	
110.000	-.2020
120.000	-.1590

MACH (1) = .599 BETA (3) = .080

X/LB	1.001
PHI	
110.000	-.2320
120.000	-.1750

MACH (1) = .601 BETA (4) = 4.160

X/LB	1.001
PHI	
110.000	-.2480
120.000	-.2060

MACH (1) = .599 BETA (5) = 8.230

X/LB	1.001
PHI	
110.000	-.2690
120.000	-.2270

MACH (2) = .903 BETA (1) = -8.170

X/LB	1.001
PHI	
110.000	-.2320
120.000	-.1570

MACH (2) = .903 BETA (2) = -4.050

X/LB	1.001
PHI	
110.000	-.2560
120.000	-.1860

MACH (2) = .899 BETA (3) = .080

X/LB	1.001
PHI	
110.000	-.2700
120.000	-.1910

AMES 11-7D7 OA12 O2A OMS POD OUTSIDE (RBPM36)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = .897 BETA (4) = 4.200

X/LB	1.001
PHI	
110.000	-.2910
120.000	-.2260

MACH (2) = .902 BETA (5) = 8.330

X/LB	1.001
PHI	
110.000	-.2880
120.000	-.2120

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7ft OA12 OEA OMS POD OUTSIDE (RBPM37) (01 MAY 73)

REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 28.5350 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0390 SCALE

PARAMETRIC DATA

ALPHA = 15.000 RUDDER = .000
ELEVON = .000 RUDFLR = 45.000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .996 BETA (1) = -8.050 X/LB 1.001
PHI
110.000 -.2310
120.000 -.1670

MACH (1) = .998 BETA (2) = -3.990 X/LB 1.001
PHI
110.000 -.2420
120.000 -.1900

MACH (1) = .998 BETA (3) = .080 X/LB 1.001
PHI
110.000 -.2900
120.000 -.2300

MACH (1) = .996 BETA (4) = 4.160 X/LB 1.001
PHI
110.000 -.2880
120.000 -.2390

MACH (1) = .997 BETA (5) = 8.290 X/LB 1.001
PHI
110.000 -.3080
120.000 -.2680

MACH (2) = .999 BETA (1) = -8.150 X/LB 1.001
PHI
110.000 -.3120
120.000 -.1900

MACH (2) = .997 BETA (2) = -4.030 X/LB 1.001
PHI
110.000 -.3160
120.000 -.1970

MACH (2) = .900 BETA (3) = .070 X/LB 1.001
PHI
110.000 -.3080
120.000 -.1750

AMES 11-7ft OA12 OEA OMS POD OUTSIDE (RBPM37)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = .902 BETA (4) = 4.200

PHI	X/LB 1.001
110.000	-.2930
120.000	-.2080

MACH (2) = .902 BETA (5) = 8.330

PHI	X/LB 1.001
110.000	-.2610
120.000	-.1890

AMES 11-707 OA12 OEA OMS POD OUTSIDE (RBPM39) (01 MAY 73)

REFERENCE DATA

SREF = 2.4219 SQ.FT. XMRP = 28.5390 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0350 SCALE

PARAMETRIC DATA

ALPHA = 20.000 RUDDER = .000
ELEVON = .000 RUDFLR = 40.000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .599 BETA (1) = -8.000

X/LB	1.001
PHI	
115.000	-.3070
120.000	-.1740

MACH (1) = .598 BETA (2) = -3.980

X/LB	1.001
PHI	
115.000	-.3240
120.000	-.2350

MACH (1) = .597 BETA (3) = .080

X/LB	1.001
PHI	
115.000	-.3760
120.000	-.2690

MACH (1) = .597 BETA (4) = 4.190

X/LB	1.001
PHI	
115.000	-.3580
120.000	-.2950

MACH (1) = .598 BETA (5) = 8.300

X/LB	1.001
PHI	
115.000	-.3710
120.000	-.3440

MACH (2) = .901 BETA (1) = -8.080

X/LB	1.001
PHI	
115.000	-.4120
120.000	-.2690

MACH (2) = .899 BETA (2) = -3.990

X/LB	1.001
PHI	
115.000	-.4120
120.000	-.3020

MACH (2) = .901 BETA (3) = .080

X/LB	1.001
PHI	
115.000	-.4240
120.000	-.3530

AMES 11-7B7 OA12 O2A OMS POD OUTSIDE (RBFM38)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = .900 BETA (4) = 0.220

X/LB	1.001
PHI	
115.000	-.4960
120.000	-.3950

MACH (2) = .899 BETA (5) = 0.360

X/LB	1.001
PHI	
115.000	-.4620
120.000	-.4530

AMES 11-7X7 OA12 O2A OMS POD OUTSIDE (RBPM39) (01 MAY 73)

REFERENCE DATA

SREF =	2.4210	SQ.FT.	XMRP =	28.5300	INCHES
LREF =	39.0490	INCHES	YMRP =	.0000	INCHES
BREF =	39.0490	INCHES	ZMRP =	.0000	INCHES
SCALE =	.0300	SCALE			

PARAMETRIC DATA

BETA =	.000	RUDDER =	.000
ELEVON =	.000	RUDFLR =	.000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = 1.099 ALPHA (1) = -4.590

X/LB	1.001
PHI	
110.000	-.3170
120.000	-.2330

MACH (1) = 1.100 ALPHA (2) = -3.520

X/LB	1.001
PHI	
110.000	-.3140
120.000	-.2390

MACH (1) = 1.100 ALPHA (3) = -1.490

X/LB	1.001
PHI	
110.000	-.3230
120.000	-.2500

MACH (1) = 1.098 ALPHA (4) = .540

X/LB	1.001
PHI	
110.000	-.3260
120.000	-.2600

MACH (1) = 1.100 ALPHA (5) = 2.510

X/LB	1.001
PHI	
110.000	-.3430
120.000	-.2750

MACH (1) = 1.099 ALPHA (6) = 4.050

X/LB	1.001
PHI	
110.000	-.3650
120.000	-.2800

MACH (1) = 1.100 ALPHA (7) = 6.630

X/LB	1.001
PHI	
110.000	-.3660
120.000	-.3290

MACH (1) = 1.100 ALPHA (8) = 8.590

X/LB	1.001
PHI	
110.000	-.3940
120.000	-.3730

AMES 11-7X7 OA12 O2A OMS POD OUTSIDE (RBFM39)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = 1.199 ALPHA (9) = 9.97D

X/LB	1.001
PHI	
115.000	-.279D
125.000	-.19.D

MACH (1) = 1.151 ALPHA (10) = 14.97D

X/LB	1.001
PHI	
115.000	-.387D
125.000	-.357D

MACH (2) = 1.247 ALPHA (1) = -4.44D

X/LB	1.001
PHI	
115.000	-.162D
125.000	-.115D

MACH (2) = 1.248 ALPHA (2) = -3.47D

X/LB	1.001
PHI	
115.000	-.183D
125.000	-.124D

MACH (2) = 1.247 ALPHA (3) = -1.47D

X/LB	1.001
PHI	
115.000	-.198D
125.000	-.147D

MACH (2) = 1.248 ALPHA (4) = .52D

X/LB	1.001
PHI	
115.000	-.223D
125.000	-.164D

MACH (2) = 1.250 ALPHA (5) = 2.58D

X/LB	1.001
PHI	
115.000	-.248D
125.000	-.183D

MACH (2) = 1.248 ALPHA (6) = 4.57D

X/LB	1.001
PHI	
115.000	-.265D
125.000	-.215D

MACH (2) = 1.248 ALPHA (7) = 6.67D

X/LB	1.001
PHI	
115.000	-.287D
125.000	-.234D



SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = 1.249 ALPHA (8) = 8.660 X/LB 1.001
PHI
110.000 -.2940
120.000 -.2540

MACH (2) = 1.246 ALPHA (9) = 10.030 X/LB 1.001
PHI
110.000 -.2920
120.000 -.3080

MACH (2) = 1.244 ALPHA (10) = 14.980 X/LB 1.001
PHI
110.000 -.3760
120.000 -.3590

MACH (3) = 1.398 ALPHA (1) = -4.420 X/LB 1.001
PHI
110.000 -.0970
120.000 -.0710

MACH (3) = 1.395 ALPHA (2) = -3.420 X/LB 1.001
PHI
110.000 -.0960
120.000 -.0800

MACH (3) = 1.398 ALPHA (3) = -1.430 X/LB 1.001
PHI
110.000 -.1380
120.000 -.1110

MACH (3) = 1.397 ALPHA (4) = .520 X/LB 1.001
PHI
110.000 -.1680
120.000 -.1350

MACH (3) = 1.396 ALPHA (5) = 2.600 X/LB 1.001
PHI
110.000 -.1910
120.000 -.1550

MACH (3) = 1.397 ALPHA (6) = 4.570 X/LB 1.001
PHI
110.000 -.2210
120.000 -.1840

AMES 11-7U7 OA12 OEA OMS POD OUTSIDE (RBFM39)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (3) = 1.399 ALPHA (7) = 8.445

X/LB	1.001
PHI	
115.000	-.2360
120.000	-.2120

MACH (3) = 1.398 ALPHA (8) = 8.710

X/LB	1.001
PHI	
115.000	-.2740
120.000	-.2360

MACH (3) = 1.397 ALPHA (9) = 10.110

X/LB	1.001
PHI	
115.000	-.2830
120.000	-.2540

MACH (3) = 1.394 ALPHA (10) = 15.030

X/LB	1.001
PHI	
115.000	-.3350
120.000	-.2930

DATE 10 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 02A OMS POD OUTSIDE (RBPM40) (01 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHA =	.500	RUDDER =	.000
ELEVON =	.000	RUDFLR =	.000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = 1.099 BETA (1) = -8.080

X/LB	1.001
PHI	
110.000	-.2700
120.000	-.1680

MACH (1) = 1.101 BETA (2) = -4.000

X/LB	1.001
PHI	
110.000	-.3040
120.000	-.2020

MACH (1) = 1.100 BETA (3) = -1.960

X/LB	1.001
PHI	
110.000	-.3120
120.000	-.2280

MACH (1) = 1.099 BETA (4) = .080

X/LB	1.001
PHI	
110.000	-.3270
120.000	-.2590

MACH (1) = 1.099 BETA (5) = 2.150

X/LB	1.001
PHI	
110.000	-.3590
120.000	-.2950

MACH (1) = 1.100 BETA (6) = 4.230

X/LB	1.001
PHI	
110.000	-.3630
120.000	-.3220

MACH (1) = 1.099 BETA (7) = 8.390

X/L3	1.001
PHI	
110.000	-.3890
120.000	-.3730

MACH (2) = 1.230 BETA (1) = -8.040

X/LB	1.001
PHI	
110.000	-.1420
120.000	-.0480

AMES 11-7U7 OA12 O2A OMS POD OUTSIDE (RBPM40)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = 1.247 BETA (2) = -3.97U

X/LB	1.UU1
PHI	
11U.UUU	-.187U
12U.UUU	-.1U2U

MACH (2) = 1.247 BETA (3) = -1.94U

X/LB	1.UU1
PHI	
11U.UUU	-.2U1U
12U.UUU	-.136U

MACH (2) = 1.248 BETA (4) = .U8U

X/LB	1.UU1
PHI	
11U.UUU	-.224U
12U.UUU	-.174U

MACH (2) = 1.245 BETA (5) = 2.14U

X/LB	1.UU1
PHI	
11U.UUU	-.249U
12U.UUU	-.2U7U

MACH (2) = 1.245 BETA (6) = 4.21U

X/LB	1.UU1
PHI	
11U.UUU	-.265U
12U.UUU	-.239U

MACH (2) = 1.247 BETA (7) = 6.34U

X/LB	1.UU1
PHI	
11U.UUU	-.3U4U
12U.UUU	-.27BU

MACH (3) = 1.396 BETA (1) = -U.14U

X/LB	1.UU1
PHI	
11U.UUU	-.112U
12U.UUU	-.U62U

MACH (3) = 1.399 BETA (2) = -3.97U

X/LB	1.UU1
PHI	
11U.UUU	-.116U
12U.UUU	-.U63U

MACH (3) = 1.397 BETA (3) = .U8U

X/LB	1.UU1
PHI	
11U.UUU	-.162U
12U.UUU	-.13UU

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 O2A OMS POD OUTSIDE (RBPM4U)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (3) = 1.394 BETA (4) = 4.21U

X/LB	1.UU1
PHI	
115.UUU	-.192U
12U.UUU	-.183U

MACH (3) = 1.392 BETA (5) = 8.36U

X/LB	1.UU1
PHI	
115.UUU	-.229U
12U.UUU	-.227U

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-7U7 OA12 O2A OMS POD OUTSIDE (SBFM41 01 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHA =	-4.000	RUDDER =	-10.000
ELEVON =	.000	FLAPS =	.000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -4.910 X/LB 1.001

PHI	
110.000	-.1700
120.000	-.1460

MACH (1) = .598 BETA (2) = .090 X/LB 1.001

PHI	
110.000	-.2000
120.000	-.1780

MACH (1) = .600 BETA (3) = 5.280 X/LB 1.001

PHI	
110.000	-.2250
120.000	-.2120

MACH (2) = .900 BETA (1) = -4.990 X/LB 1.001

PHI	
110.000	-.2220
120.000	-.1660

MACH (2) = .900 BETA (2) = .090 X/LB 1.001

PHI	
110.000	-.2360
120.000	-.1990

MACH (2) = .901 BETA (3) = 5.360 X/LB 1.001

PHI	
110.000	-.2390
120.000	-.2190

DATE 18 SEP 73 TABULATED PRESSURE DATA - OA12A

AMES 11-707 OA12 02A OMS POD OUTSIDE (RBPM42) (01 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHA =	-4.000	RUDDER =	-20.000
ELEVON =	.000	RUDFLR =	.000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .596 BETA (1) = -4.900

X/LB	1.001
PHI	
110.000	-.2040
120.000	-.1500

MACH (1) = .596 BETA (2) = .100

X/LB	1.001
PHI	
110.000	-.2240
120.000	-.1830

MACH (1) = .596 BETA (3) = 5.280

X/LB	1.001
PHI	
110.000	-.2430
120.000	-.2190

MACH (2) = .904 BETA (1) = -4.980

X/LB	1.001
PHI	
110.000	-.2350
120.000	-.1750

MACH (2) = .900 BETA (2) = .100

X/LB	1.001
PHI	
110.000	-.2570
120.000	-.2090

MACH (2) = .901 BETA (3) = 5.360

X/LB	1.001
PHI	
110.000	-.2690
120.000	-.2350

AMES 11-707 OA12 OEA OMS POD OUTSIDE (RBPM43) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = -4.000 RUDDER = .000
ELEVON = 10.000 RUDFLR = .000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .600 BETA (1) = -4.910 X/LB 1.001

PHI	
110.000	-.2290
120.000	-.1810

MACH (1) = .599 BETA (2) = .080 X/LB 1.001

PHI	
110.000	-.2640
120.000	-.2290

MACH (1) = .597 BETA (3) = 5.270 X/LB 1.001

PHI	
110.000	-.2790
120.000	-.2660

MACH (2) = .897 BETA (1) = -4.980 X/LB 1.001

PHI	
110.000	-.2830
120.000	-.2200

MACH (2) = .896 BETA (2) = .080 X/LB 1.001

PHI	
110.000	-.2630
120.000	-.2350

MACH (2) = .903 BETA (3) = 5.340 X/LB 1.001

PHI	
110.000	-.2560
120.000	-.2390

AMES 11-707 OA12 O2A OMS POD OUTSIDE (RBPM44) (01 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHA =	-4.000	RUDDER =	.000
ELEVON =	-10.000	RUDFLR =	.000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .597 BETA (1) = -4.910

X/LB	1.001
PHI	
110.000	-.1530
120.000	-.1160

MACH (1) = .597 BETA (2) = .080

X/LB	1.001
PHI	
110.000	-.1670
120.000	-.1340

MACH (1) = .597 BETA (3) = 5.270

X/LB	1.001
PHI	
110.000	-.1720
120.000	-.1510

MACH (2) = .903 BETA (1) = -4.980

X/LB	1.001
PHI	
110.000	-.2070
120.000	-.1590

MACH (2) = .902 BETA (2) = .090

X/LB	1.001
PHI	
110.000	-.2250
120.000	-.1880

MACH (2) = .904 BETA (3) = 5.340

X/LB	1.001
PHI	
110.000	-.2380
120.000	-.2150

AMES 11-707 OA12 O2A OMS POD OUTSIDE (RBPM45) (01 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHA =	-4.000	RUDDER =	.000
ELEVON =	.000	RUDFLR =	.000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .601 BETA (1) = -4.910

X/LB	1.001
PHI	
110.000	-.1840
120.000	-.1430

MACH (1) = .597 BETA (2) = .090

X/LB	1.001
PHI	
110.000	-.2080
120.000	-.1740

MACH (1) = .598 BETA (3) = 5.280

X/LB	1.001
PHI	
110.000	-.1940
120.000	-.2090

MACH (2) = .901 BETA (1) = -5.000

X/LB	1.001
PHI	
110.000	-.2240
120.000	-.1630

MACH (2) = .902 BETA (2) = .090

X/LB	1.001
PHI	
110.000	-.2330
120.000	-.1960

MACH (2) = .900 BETA (3) = 5.350

X/LB	1.001
PHI	
110.000	-.2360
120.000	-.2080

AMES 11-707 OA12 O2A OMS POD OUTSIDE (RBPM46) (01 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

BETA =	.000	RUDDER =	.000
ELEVON =	.000	RUDFLR =	.000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .600 ALPHA (1) =-15.850

X/LB	1.001
PHI	
110.000	-.2480
120.000	-.2380

MACH (1) = .599 ALPHA (2) =-10.490

X/LB	1.001
PHI	
110.000	-.2110
120.000	-.2120

MACH (1) = .599 ALPHA (3) = -5.200

X/LB	1.001
PHI	
110.000	-.2180
120.000	-.1910

MACH (1) = .599 ALPHA (4) = .050

X/LB	1.001
PHI	
110.000	-.2140
120.000	-.1700

MACH (2) = .900 ALPHA (1) =-16.390

X/LB	1.001
PHI	
110.000	-.2980
120.000	-.2900

MACH (2) = .901 ALPHA (2) =-10.840

X/LB	1.001
PHI	
110.000	-.2900
120.000	-.2690

MACH (2) = .900 ALPHA (3) = -5.380

X/LB	1.001
PHI	
110.000	-.2500
120.000	-.2070

MACH (2) = .902 ALPHA (4) = .080

X/LB	1.001
PHI	
110.000	-.2210
120.000	-.1780

AMES 11-7U7 OA12 O2A OMS POD OUTSIDE (RBFM47) (01 MAY 73)

REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0900 SCALE

PARAMETRIC DATA

ALPHA = -5.000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) =-10.300

X/LB	1.001
PHI	
110.000	-.1770
120.000	-.1220

MACH (1) = .597 BETA (2) = -5.190

X/LB	1.001
PHI	
110.000	-.2050
120.000	-.1540

MACH (1) = .597 BETA (3) = 5.000

X/LB	1.001
PHI	
110.000	-.2340
120.000	-.2220

MACH (1) = .599 BETA (4) = 10.080

X/LB	1.001
PHI	
110.000	-.2270
120.000	-.2560

MACH (2) = .898 BETA (1) =-10.440

X/LB	1.001
PHI	
110.000	-.2220
120.000	-.1460

MACH (2) = .896 BETA (2) = -5.270

X/LB	1.001
PHI	
110.000	-.2410
120.000	-.1770

MACH (2) = .902 BETA (3) = 5.070

X/LB	1.001
PHI	
110.000	-.2360
120.000	-.2210

MACH (2) = .898 BETA (4) = 10.220

X/LB	1.001
PHI	
110.000	-.2480
120.000	-.2930

AMES 11-7?? OA12 O2A OMS POD OUTSIDE (RBPM48) (01 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.0490 INCHES YMRP = .0000 INCHES
BREF = 39.0490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = -10.000 RUDDER = .000
ELEVON = .000 RUDFLR = .000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = .598 BETA (1) =-10.280

X/LB	1.001
PHI	
110.000	-.2000
120.000	-.1400

MACH (1) = .598 BETA (2) = -5.180

X/LB	1.001
PHI	
110.000	-.2220
120.000	-.1740

MACH (1) = .597 BETA (3) = 5.020

X/LB	1.001
PHI	
110.000	-.2370
120.000	-.2370

MACH (1) = .599 BETA (4) = 10.120

X/LB	1.001
PHI	
110.000	-.2100
120.000	-.2620

MACH (2) = .901 BETA (1) =-10.460

X/LB	1.001
PHI	
110.000	-.2750
120.000	-.1800

MACH (2) = .898 BETA (2) = -5.270

X/LB	1.001
PHI	
110.000	-.2600
120.000	-.2290

MACH (2) = .901 BETA (3) = 5.110

X/LB	1.001
PHI	
110.000	-.2820
120.000	-.2850

MACH (2) = .900 BETA (4) = 10.300

X/LB	1.001
PHI	
110.000	-.2530
120.000	-.3410